



ANNUAL REPORT

FY 2018

*Division of Environmental Health
Department of Public Health and Social Services*

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STAFF PHOTOS FY 2018

OFFICE OF THE CHIEF:
From left to right: Remy Suva,
M. Thomas Nadeau, and
Terry Barcinas.



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**BUREAU OF
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Francis Epres



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Jennifer Mendiola, Debbie Mafnas. Not shown:
Julita Santos.

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right: Chie Takase, Tamera Shimizu, Michelle
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Marilou Scroggs, Katherine Del Mundo, Maria
Leilani Navarro, and Evan Lum.

ACRONYMS

BCI	Bureau of Compliance and Investigation
BIE	Bureau of Inspection and Enforcement
BPSI	Bureau of Program Support and Information
CCP	Consumer Commodities Program
CDC	U.S. Centers for Disease Control and Prevention
CPSC	Consumer Product Safety Commission
CSP	Controlled Substances Program
CSR	Controlled Substances Registration
DEA	U.S. Drug Enforcement Administration
DEH	Division of Environmental Health
DPHSS	Department of Public Health & Social Services
EPHO	Environmental Public Health Officer
ET	Environmental Technician
FDA	U. S. Food and Drug Administration
GCA	Guam Code Annotated
GCQA	Guam Customs and Quarantine Agency
GEPHEM	Guam Environmental Public Health Education Month
GEPHL	Guam Environmental Public Health Laboratory
GFC	Guam Food Code
GFSTF	Guam Food Safety Task Force
HRE	Health-Regulated Establishment
MAC	Mosquito Advisory Council
MFSE	Mobile Food Service Establishment
MSCP	Mosquito Surveillance and Control Program
NRC	U.S. Nuclear Regulatory Commission
OAG	Office of the Attorney General of Guam
P&S	Plans and Specifications Section
PCR	Polymerase Chain Reaction
PCS	Processing Center Section
PDMP	Prescription Drug Monitoring Program
PIHOA	Pacific Island Health Officers Association
PIRVeL	Pacific Island Regional Vector Laboratory
PIVMC	Pacific Islands Vector Management Control
PMD	Preventive Medicine Department, U.S. Naval Hospital Guam
SOP	Standard Operating Procedure
TFSE	Temporary Food Service Establishment
VBDL	Vector-borne Disease Laboratory
USDA	U. S. Department of Agriculture

MISSION AND VISION

MISSION STATEMENT

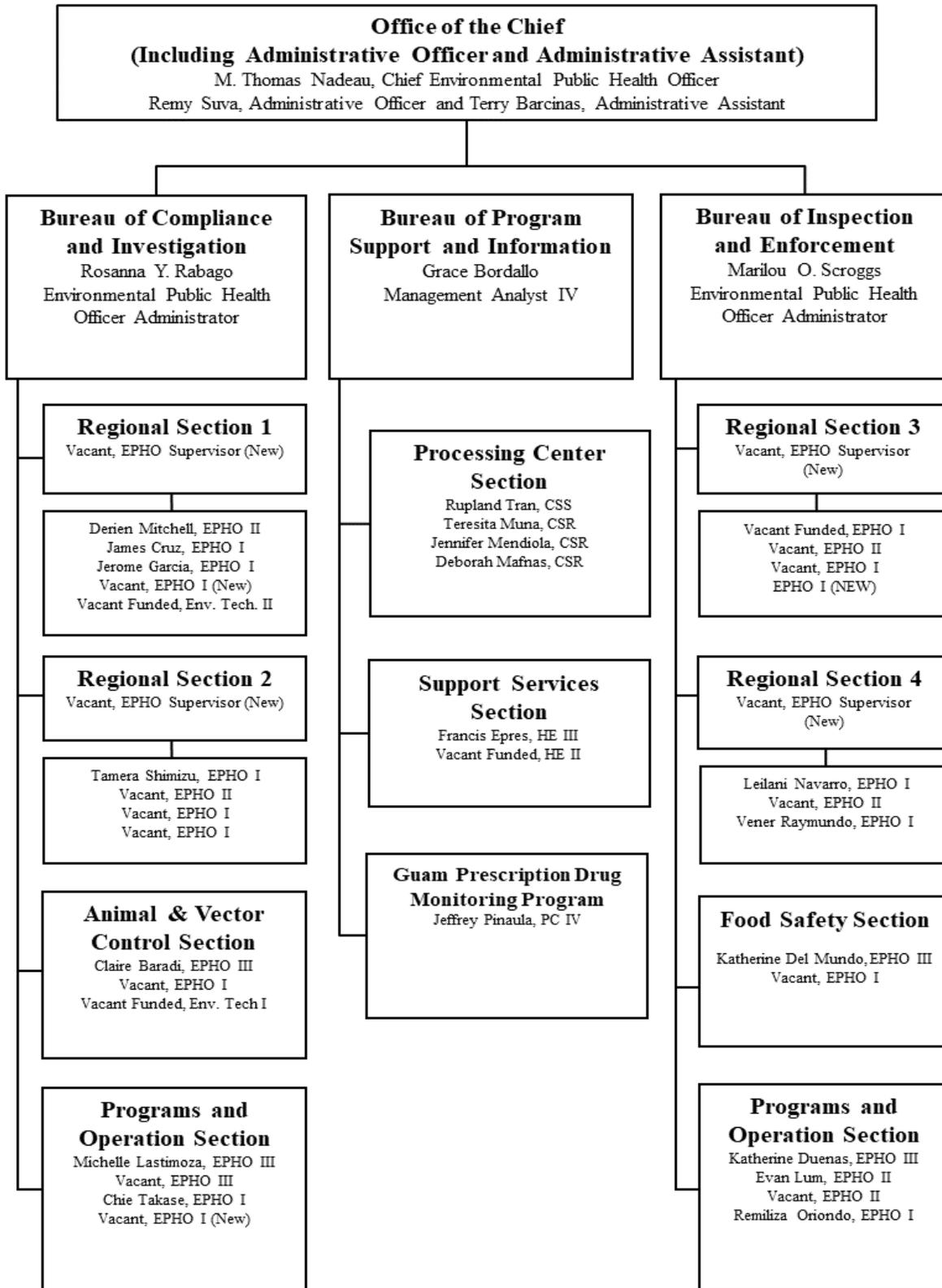
The mission of the Division of Environmental Health of the Department of Public Health and Social Services is to serve and protect the people of Guam from environmental hazards and drug diversion through education and the implementation of governing laws designed to prevent injuries, disabilities, diseases, and deaths.

VISION STATEMENT

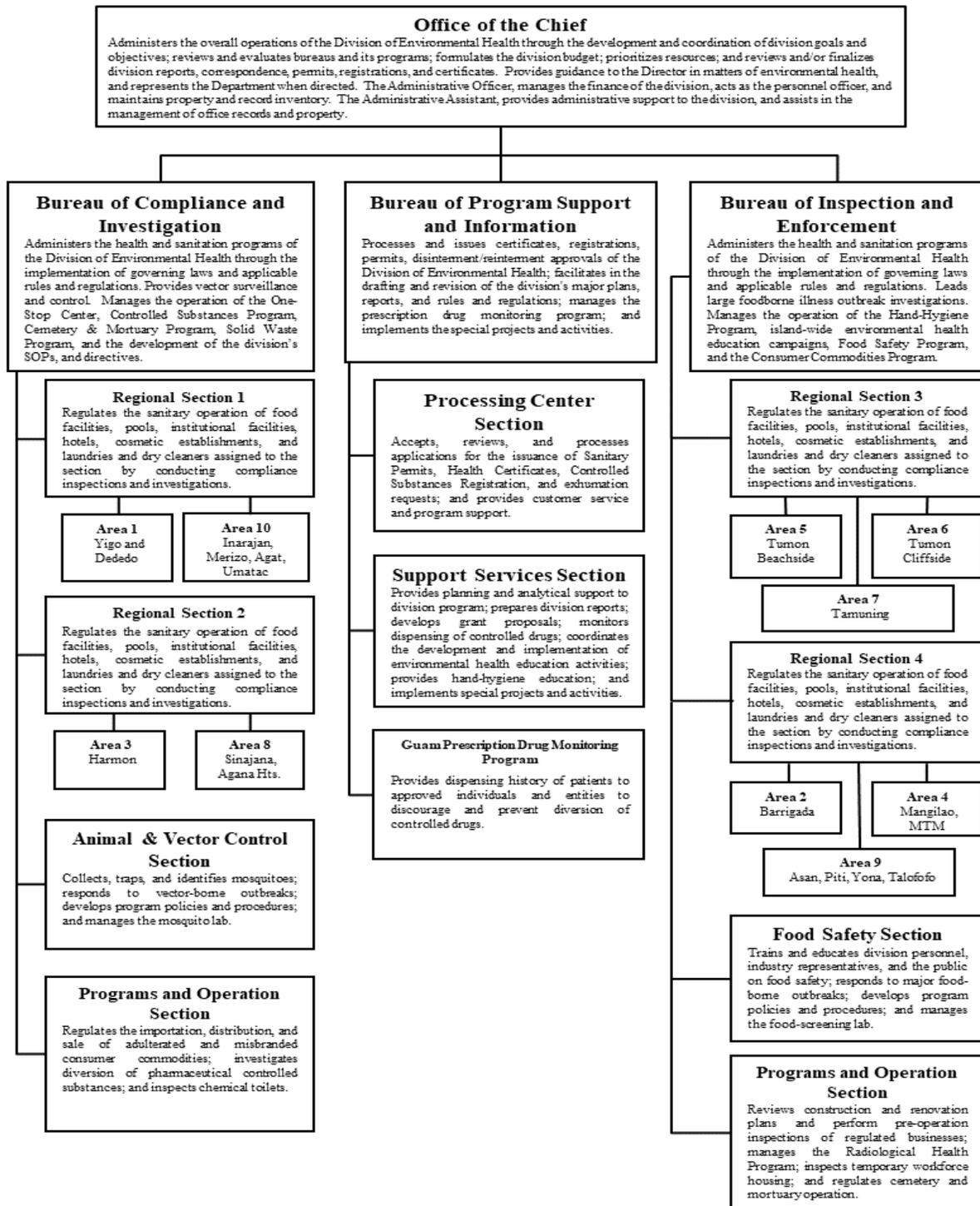
The people of Guam are not adversely impacted by their environment through the effective operation of DEH programs resulting in a satisfied, healthier, and more knowledgeable population.

DEH ORGANIZATIONAL CHART

Division of Environmental Health Organizational Chart



Division of Environmental Health Functional Chart



FISCAL YEAR 2018 HIGHLIGHTS

This section illustrates the significant highlights of the Division of Environmental Health (DEH) in Fiscal Year 2018.

GUAM ENVIRONMENTAL PUBLIC HEALTH LABORATORY

Guam Housing and Urban Renewal Authority (GHURA), the project manager in the construction of the Guam Environmental Public Health Laboratory (GEPHL), terminated the contract of Rex International on March 29, 2018, for failing to comply with its contractual obligations to complete the construction of GEPHL. Numerous structural/physical deficiencies and damages, most of which were reported in FY 2017, were not addressed, or properly addressed, in FY 2018 by the contractor. One of the major consequences of the contractor's failure was the inoperability of the Food Laboratory of GEPHL. Other significant issues included:

- VIDAS (analytical instrument) and the biosafety cabinet were pending installation and certification, respectively;
- Facility did not meet Biosafety Level 3 (BSL-3) specifications; and
- The HVAC system failed to work properly.

As a result, GHURA notified the surety company, First Net, which had bonded Rex International for the construction project.

In an unrelated matter involving GEPHL, Tokio Marine Pacific Insurance Limited, the insurer of the individual who drove into, and damaged, the entrance gate of GEPHL on October 18, 2017, contracted Rex International to repair the gate for \$1,661.09. The repairs to the gate were made in May 2018.

PERSONNEL

Out of \$1,725,542.44 appropriated for this purpose, the Division expended \$1,439,753.49 (83%); to fund personnel for this fiscal year, the unexpended amount was due to unfilled vacancies. The appropriations for Personnel were \$686,187.00 from the General Fund, \$978,709.00 from EHF, and \$60,646.44 from DSIRF.

The Division recruited four new staff during the fiscal year. Rupland Tran, Customer Service Supervisor, started his employment with DEH on October 23, 2017; Grace Bordallo, Management Analyst IV, was recruited on November 6, 2017; Julita Santos, Customer Service Representative, started on March 19, 2018; and Matthew Orot, Environmental Technician I, started on July 16, 2018.

PROCESSING CENTER

The Processing Center Section (PCS) issued the following number of permits, certificates, and registrations, along with the respective revenue in parentheses: 3,247 Sanitary Permits (\$879,266.79); 28,918 Health Certificates (\$495,548); and 570 Guam Controlled Substances Registration Certificates (\$191,230). PCS also approved 21 Disinterment and 8 Disinterment-Reinterment requests in FY 2018.

FISCAL YEAR 2018 HIGHLIGHTS

GRANTS

The Division was awarded, on June 15, 2018, a grant from the U.S. Department of the Interior to assist DEH in the maintenance of GEPHL. The proposal, entitled, “Build and Sustain the Capacity of the Guam Environmental Public Health Laboratory (GEPHL)” resulted in the amount of \$107,112 for DEH. The grant, also known as the Technical Assistance Project (TAP) grant, will assist DEH in better maintaining the facility’s major fixed assets (i.e., generator, HVAC system).

On August 14, 2018, DEH was awarded the Epidemiological and Laboratory Capacity (ELC) Year 5, Project M1 grant to help improve the Division’s Mosquito Surveillance and Control Program (MSCP) through the funding for the recruitment of a medical entomologist and Environmental Technician I, and approval for staff travel to attend the 2019 ELC Grantees Meeting in Atlanta, GA. A total of \$136,521 was awarded to DEH. The recruitment of these two positions is necessary for building the capacity of the MSCP, inclusive of its field and laboratory activities. The Division was also awarded funds for Project II of the ELC grant to strengthen its foodborne illness outbreak response capacity. Project II will fund the partial salary of existing EPHO III to develop a Foodborne Illness Outbreak (Fbi) Response Manual. DEH was awarded \$42,210 for Project II.

The Guam Prescription Drug Monitoring Program (GPDMP) of DEH was also awarded a grant in FY 2018 (September 18, 2018). The 2018 Comprehensive Opioid Abuse Site-Based Program (COAP) grant from the Bureau of Justice Programs was in the amount of \$512,759. The COAP grant will enable the Division to enhance the data analysis capabilities of the Guam PDMP database, and to collaborate with the Commonwealth of the Northern Marianas Island to integrate their pharmacies and physicians into the Guam PDMP database.

MOSQUITO SURVEILLANCE AND CONTROL

- **Active Surveillance of Mosquitoes**

The Mosquito Surveillance and Control Program (MSCP) of DEH continued to conduct routine mosquito surveillance activities of Tier 1 locations as outlined in the Guam Vector Management Strategic Plan (2017-2019); these sites were Guam’s ports of entry and select high-risk transmission areas. The traps utilized were primarily BG-2 Sentinel and oviposition mosquito traps. As a result of performing regular and frequent surveillance activities, MSCP staff have improved their abilities in preparing and troubleshooting mosquito traps, rearing mosquito larvae to adulthood, and sorting and identifying adult mosquitoes. These activities also enabled DEH to expand its mosquito repository for reference specimens.



Photo 1. MSCP mosquito repository
(Source: DEH, 04/27/18)

- **Mosquito Surveillance and Control Support**

Pacific Island Health Officers Association (PIHOA) funded a new regional medical entomologist, Dr. Grayson Brown, on March 12, 2018. Dr. Brown was embedded in GEPHL for the purpose of developing the mosquito surveillance and control programs of

FISCAL YEAR 2018 HIGHLIGHTS

the U.S. Affiliated Pacific Islands (USAPIs). His service included providing expertise and technical assistance to advance each of the islands' capability to collect and report mosquito surveillance data. Through these efforts, Dr. Brown also assisted DEH in improving its mosquito program and its lab, and the Division's effort to become a regional laboratory for mosquito control. Through a collaborative effort led by PIHOA, the first Pacific Island Vector Management Strategic Plan was developed, which was endorsed by the Northern Pacific Environmental Health Association, and then formally adopted by the PIHOA Board for implementation. The plan was then approved by the Pacific Island Vector Management Council. Two MSCP staff, R. Rabago and C. Baradi, were nominated and currently serve as the chairperson and secretary of the Council, respectively.

OUTREACH

- **Swimming Pool Establishments**

The Division held its 3rd Annual Guam Environmental Public Health Education Month (GEPHEM) 2018 in September. The celebration began with the proclamation signing by the Governor, which was held on August 28, 2018, which declared the month of September 2018 as GEPHEM. The event was officiated by Lieutenant Governor Tenorio. With the theme, *We're Making a Splash towards the Model Aquatic Health Code*, DEH promoted the safe and sanitary operation of the island's swimming pools using daily tips and weekly videos on social media (Facebook, Instagram, and Twitter). DEH also co-hosted a workshop and training course (September 17-21, 2018): National Swimming Pool Foundation's Pool/Spa Operator and Certified Pool/Spa Inspector. In addition, educational brochures and posters were distributed to swimming pool operators attending this training.



Photo 2. William Best of Best Aquatic (left) providing training to EPHO II, Derien Mitchell, during the Guam EPHEM MAHC training. (Source: DEH, 09/18/18)

- **Prescription Drug Monitoring Program**

The staff of the Division's Controlled Substances Program and the Prescription Drug Monitoring Program participated in the National Prescription Drug Take Back Campaign on April 28, 2018, at the Agana Shopping Center in Hagåtña, by distributing posters and flyers to numerous local pharmacies, shopping centers, clinics, and the Guam Memorial Hospital Authority. The campaign provided the public an opportunity to drop off unused, unwanted, and/or expired medications for proper disposal by the U.S. Drug Enforcement Agency. The National Take Back Initiative event collected over 442 pounds of drugs from multiple sites around the island.

FISCAL YEAR 2018 HIGHLIGHTS

ADMINISTRATIVE PENALTIES

Eleven administrative penalties were served to owners of various health-regulated establishments in FY 2018. A total of \$1,800.00 in monetary penalties were collected and deposited into the General Fund account. All but two establishments paid their fines; establishments with outstanding fines will be referred to the Office of the Attorney General in FY 2019.

COMPLAINTS

A total of 167 public complaints were received in Fiscal Year 2018. Additionally, DEH still had 53 unresolved complaints from FY 2017 that were carried into FY 2018; these cases were either pending corrective action or follow-up by DEH. One hundred thirty-one (131) cases were closed this fiscal year, but 89 cases were still pending action and carried into Fiscal Year 2019.

COMPLIANCE INSPECTIONS

The Division conducted a total of 1,192 sanitation inspections of 669 different health-regulated facilities in FY 2018. This was an increase of 1.1% from FY 2017. Of the 1,192 inspections conducted, 212 were of temporary food service establishments (17.8%), 174 restaurants (14.6%), 157 child care facilities (13.2%), 109 retails (9.1%), and 108 dormitories (9.1%). The increase in the inspection of restaurants and retails was due to complaints which resulted in 40 closures. The slight increase in inspection numbers from the previous fiscal year was still less than 10% of the total inspection number mandated by law (~12,000 inspections), which directs DEH to inspect every health-regulated establishment four times a year (3,000 HREs x 4 inspections per year).

The Division conducted regulatory inspections of food vendors at the 2018 Micronesia Island Fair at Paseo in Hagåtña, which was held on May 2-6, 2018; there were 7 TFSE vendors and 8 MFSE vendors at the event. Like the previous year, the event operated for five days and operators were granted a waiver of the full-enclosure requirement, but with the provision that DEH would be increasing its monitoring during the festival. Consequently, DEH staff conducted inspections of all the food vendors and monitored their activities throughout the entire event.

CONSUMER COMMODITIES

A total of 43 imported commodities that were detained by Guam Customs and Quarantine Agency were acted upon by DEH. DEH reviewed all 43 detainments, which were comprised of the following number and type: 13 foods (30%), 16 drugs (37%), 8 cosmetics (19%), 5 hazardous substances (12%), and one item not regulated by the Division (2%). A total of 10,076 pieces of consumer articles were detained this fiscal year as a result. A breakdown by type and amount are as follows: Food (535 pcs.), Food/Drug (1,994 pcs.), Drug (1,494 pcs.), Drug/Cosmetic (4,530 pcs.), Cosmetic (607 pcs.), and Hazardous Substance (916 pcs.). These detained commodities originated from the Philippines, South Korea, Hong Kong, China, Japan, Taipei, and Palau.

In response to 116 product recalls initiated by the U.S. Food and Drug Administration and the U.S. Department of Agriculture, 5,074 notification emails were sent to various island businesses, and three press releases were issued. The press releases were for recalled food items that were found on Guam. There was no activity conducted for recalls issued by the U.S. Consumer Product Safety Commission this fiscal year.

FISCAL YEAR 2018 HIGHLIGHTS

CONTROLLED SUBSTANCES

The pharmaceutical drug investigation, relative to an Administrative Search Warrant that was executed at a local veterinary clinic during FY 2013, resulted in several, local court hearings. The eventual resolution culminated in the Superior Court of Guam's issuance of Judgement and Notice of Entry on Docket on August 21, 2018 which brought closure to the case.

DEH was able to conduct one pre-operational security inspection and no complaints were received for any violations of the Uniformed Controlled Substances Act, relative to pharmaceutical controlled substances.

RULES AND REGULATIONS

Pursuant to the Administrative Adjudication Law, the draft proposed *Rules and Regulations Governing Chemical Toilets* went into effect on September 17, 2017, after the passing of 90 calendar days without any action by the Guam Legislature. As a result of the official adoption of these regulations, the three local chemical toilet companies were required to obtain a Chemical Toilet Permit, maintain records, and comply with the provisions of the regulations. Enforcement of the new regulatory requirements began this fiscal year. DEH conducted inspections of all three establishments during the Third Quarter of FY 2018. Once all establishments were deemed in compliance with the regulations, the completed applications were reviewed and approved for the Chemical Toilet Permit. By the end of FY 2018, one operator was fully permitted, while the remaining two were pending payment to receive their permits.

The proposed draft *Rules Governing the Manufacture, Distribution, and Dispensing of Controlled Substances* were officially adopted and made effective on January 21, 2018, after 90 days had lapsed without any action by the Guam Legislature. The promulgated rules updated the fee schedule for the Guam Controlled Substances Registrations (GCSR). Fees collected from the issuance of GCSR are deposited into the Controlled Substances Diversion Fund (mandate of the Guam Uniform Controlled Substances Act) to combat the diversion of pharmaceutical controlled substances, which includes the establishment of the prescription drug monitoring program. The fee increase was made necessary to adequately fund the Controlled Substances Program and the Guam Prescription Drug Monitoring Program; both programs are operated by the Division of Environmental Health.

In FY 2018, DEH completed the proposed draft *Rules and Regulations Pertaining to Barber and Beauty Shops, Cosmetology Schools, and Nail Salons*. The staff also developed the public health reasoning and economic impact statement survey for the proposed regulations which was still pending final supervisory approval. It is anticipated that the proposed regulations will undergo stakeholder review and public hearing in FY 2019.

DEH also completed the revision to the existing *Rules and Regulations Pertaining to Tattoo Shops* in FY 2018. The public health reasoning and economic impact statement survey are expected to be completed by FY 2019; it is anticipated that a public hearing will also be conducted in FY 2019.

Proposed *Regulations for the Licensing and Registration of Radioactive Materials and Other Sources of Ionizing Radiation* was drafted in FY 2018 and is pending supervisory review and approval. It is anticipated that approval for the final draft will occur in FY 2019.

RESOURCES

APPROPRIATIONS

DEH received a total budget of \$2,260,346.00 to fund personnel and operations of the Division in Fiscal Year 2018 from the Environmental Health Fund (EHF), DPHSS Sanitary Inspection Revolving Fund (DSIRF), and the General Fund (GF) (**Table 1**). This was not inclusive of the Controlled Substances Diversion Fund (\$194,240.00) and the federal grant funds of the Guam Prescription Drug Monitoring Program (U.S. Department of Justice), Technical Assistance Program (U.S. Department of Interior), and the Epidemiology and Laboratory Capacity Grant (U.S. Centers for Disease Control and Prevention). The total appropriated funds in FY 2018:

- \$759,332.00 (GF)
- \$1,363,734.00 (EHF)
- \$137,280.00 (DSIRF).

Of the amount appropriated, \$1,932,796.00 (86%) was released through various allotments to DEH for use during FY 2018.

PERSONNEL

The Division had a net decrease in the number of personnel during the fiscal year. Mr. Rupland Tran was recruited on October 23, 2018, as the new Customer Service Supervisor, a position that had been vacant since March 2016. DEH recruited a Management Analyst IV by eliminating the vacant Planner IV position; it was filled by Ms. Grace Bordallo who started on November 6, 2017, but transferred back to her previous position on August 20, 2018. Matthew Orot, Environmental Technician I, was recruited, on July 16, 2018, as a limited term employee. Teresita Muna, Customer Service Representative, retired on August 17, 2018, after more than 30 years of service in the Government of Guam. Customer Service Representative, Julita Santos, was recruited on March 19, 2018, but resigned shortly after on June 22, 2018. Recruitment for Environmental Public Health Officer I, Environmental Technician II, and a Health Educator II was still ongoing by the end of the fiscal year. The FY 2018 staffing pattern for DEH is presented in **Table 2**.

CONTRACTUAL

The Division was budgeted a total of \$192,283.56 for contractual services in Fiscal Year 2018. The General Fund had \$65,981.00 appropriated for contractual services of which \$55,521.56 was expended. These expenses were for the copier lease agreement, vehicle maintenance, blanket purchase agreement for newspaper advertisement, required procurement training classes, hotel venue, printing services, course and certificate fees for EPHOs, and signage for GEPHL. EHF budget for contractual services was \$101,879.00 of which \$70,990.15 was expended. These contractual services included copier lease agreement, dry ice, janitorial service for both GEPHL and DEH Mangilao, grounds maintenance for GEPHL, printing services, drug testing, maintenance and fuel for GEPHL generator, and petty cash reimbursement. DSIRF had \$24,423.56 appropriated for contractual services, and a total of \$16,763.49 was expended. The list of expenditures is presented in **Table 3**.

A total of \$143,275.20 in contractual services was expended in FY 2018:

- \$55,521.56 (GF)
- \$70,990.15 (EHF)
- \$16,763.49 (DSIRF)

RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH FUNDING					
GENERAL FUND (FY 2018 APPROPRIATION)					
O.C.	Personnel Services	Appropriation	Allotments	Expenditures	Lapse
111	Regular Salaries/Increments	\$508,976.00	\$425,521.00	\$425,520.80	\$83,455.20
112	Overtime/Special Pay	\$0.00	\$0.00	\$0.00	\$0.00
113	Benefits	\$177,211.00	\$144,154.00	\$144,153.39	\$33,057.61
	Total Personnel Services	\$686,187.00	\$569,675.00	\$569,674.19	\$116,512.81
O.C.	Operations	Appropriation	Allotments	Expenditures	Lapse
220	Travel Off-Island/Local Mileage Reimbursement	\$0.00	\$0.00	\$0.00	\$0.00
230	Contractual Services	\$65,981.00	\$55,522.00	\$55,521.56	\$10,459.44
233	Office Space Rental	\$0.00	\$0.00	\$0.00	\$0.00
240	Supplies & Materials	\$7,164.00	\$5,149.00	\$5,148.74	\$2,015.26
250	Equipment	\$0.00	\$0.00	\$0.00	\$0.00
280	Sub-recipient/Subgrant	\$0.00	\$0.00	\$0.00	\$0.00
271	Miscellaneous	\$0.00	\$0.00	\$0.00	\$0.00
	Total Operations	\$73,145.00	\$60,671.00	\$60,670.30	\$12,474.70
	SUBTOTAL	\$759,332.00	\$630,346.00	\$630,344.49	\$128,987.51
ENVIRONMENTAL HEALTH FUND (FY 2018 Appropriation)					
O.C.	Personnel Services	Appropriation	Allotments	Expenditures	Lapse
111	Regular Salaries/Increments	\$723,958.99	\$615,340.99	\$601,168.14	\$122,790.85
112	Overtime/Special Pay	\$0.00	\$0.00	\$0.00	\$0.00
113	Benefits	\$254,750.01	\$216,561.01	\$216,561.01	\$38,189.00
	Total Personnel Services	\$978,709.00	\$831,902.00	\$817,729.15	\$160,979.85
O.C.	Operations	Appropriation	Allotments	Expenditures	Lapse
220	Travel- Off-Island/Local Mileage Reimbursement	\$30,014.00	\$21,000.00	\$19,699.32	\$10,314.68
230	Contractual Services	\$101,879.00	\$101,879.00	\$70,990.15	\$30,888.85
233	Office Space Rental	\$0.00	\$0.00	\$0.00	\$0.00
240	Supplies & Materials	\$42,140.00	\$35,819.00	\$24,948.09	\$17,191.91
250	Equipment	\$0.00	\$0.00	\$0.00	\$0.00
361	Power Utility	\$113,992.00	\$96,893.00	\$89,847.71	\$24,144.29
362	Water Utility	\$12,000.00	\$10,200.00	\$1,225.80	\$10,774.20
363	Telephone	\$25,000.00	\$21,250.00	\$18,512.50	\$6,487.50
450	Capital Outlay	\$60,000.00	\$60,000.00	\$50,816.00	\$9,184.00
	Total Operations	\$385,025.00	\$347,041.00	\$276,039.57	\$108,985.43
	SUBTOTAL	\$1,363,734.00	\$1,178,943.00	\$1,093,768.72	\$269,965.28
SANITARY INSPECTION REVOLVING FUND (PL 33-66)					
O.C.	Personnel Services	Appropriation	Allotments	Expenditures	Lapse
111	Regular Salaries/Increments	\$44,567.44	\$38,763.44	\$38,763.44	\$5,804.00
112	Overtime/Special Pay	\$0.00	\$0.00	\$0.00	\$0.00
113	Benefits	\$16,079.00	\$13,667.00	\$13,586.71	\$2,492.29
	Total Personnel Services	\$60,646.44	\$52,430.44	\$52,350.15	\$8,296.29
O.C.	Operations	Appropriation	Allotments	Expenditures	Lapse
220	Travel- Off-Island/Local Mileage Reimbursement	\$0.00	\$0.00	\$0.00	\$0.00
230	Contractual Services	\$24,423.56	\$19,878.56	\$16,763.49	\$7,660.07
240	Supplies & Materials	\$6,744.00	\$5,732.00	\$3,848.00	\$2,896.00
250	Equipment	\$10,000.00	\$10,000.00	\$9,190.00	\$810.00
450	Capital Outlay	\$35,466.00	\$35,466.00	\$27,787.00	\$7,679.00
	Total Operations	\$76,633.56	\$71,076.56	\$57,588.49	\$19,045.07
	SUBTOTAL	\$137,280.00	\$123,507.00	\$109,938.64	\$27,341.36
	GRAND TOTAL	\$2,260,346.00	\$1,932,796.00	\$1,834,051.85	\$426,294.15

Table 1. Appropriations to the Division of Environmental Health in FY 2018.

RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH STAFFING PATTERN			
General Fund (5100A181740CE001)			
No.	Position Number	Position Title	Name of Incumbent
1	6340	EPHO III	Duenas, Katherine
2	6344	EPHO III	Baradi, Claire
3	6354	EPHO I	Raymundo, Vener
4	6352	EPHO II	Lum, Evan
5	6518	Management Analyst IV	Bordallo, Grace
6	6228	Environmental Technician II	Barcinas, Buenvendio
7	6348	Health Educator II (Former WP Secretary II)	Vacant (Barcinas, Terry)
8	6357	Customer Services Representative	Muna, Teresita S.
9	6461	Customer Services Representative Supervisor	Tran, Rupland
10	6337	EPHO III	Lastimoza, Michelle
11	6322	EPHO I	Navarro, Maria Leilani
12	6314	EPHO I	Garcia, Jerome
13	6578	Administrative Assistant	Barcinas, Terry
14	6300	EPHO III	Vacant (9/8/06)/B.Barcinas
15	6305	EPHO III	Vacant (12/1/05)/R.Contreras
16	6328	EPHO II	Vacant (7/8/02)/C.Holloway
17	6313	EPHO I	Vacant (11/15/02)/M.Tablante
18	6299	EPHO II	Vacant (9/29/04)/ J.Quichocho
19	6361	EPHO I	Vacant (1/11/02)/G.Borja
20	6315	EPHO I	Vacant (3/14/02)/G.Mendiola
21	6317	EPHO I	Vacant/Never Filled
22	6318	EPHO I	Vacant/Never Filled
23	NEW	EPHO I	Vacant/New
24	NEW	EPHO I	Vacant/New
25	NEW	EPHO I	Vacant/New
Environmental Health Fund (5600A181740CE201)			
No.	Position Number	Position Title	Name of Incumbent
1	6335	Chief EPHO	Nadeau, Masatomo T.
2	6316	EPHO Administrator	Rabago, Rosanna Y.
3	6091	EPHO Administrator	Scroggs, Marilou
4	6182	EPHO I	Shimizu, Tamera
5	6042	Administrative Officer	Suva, Remy M.
6	6094	Customer Services Representative	Mendiola, Jennifer
7	6464	Customer Services Representative	Mafnas, Deborah L.
8	6093	EPHO II	Mitchell, Derien K.
9	6188	EPHO I	Cruz, James
10	6026	EPHO I	Vacant Funded
11	6290	EPHO I	Takase, Chie
12	6092	EPHO III	Del Mundo, Katherine U.
13	6165	Health Educator III	Epres, Francis V.
14	6062	Customer Service Representative	Santos, Julita
15	NEW	Env. Public Health Officer Supervisor	Vacant
16	NEW	Env. Public Health Officer Supervisor	Vacant
17	NEW	Env. Public Health Officer Supervisor	Vacant
18	NEW	Env. Public Health Officer Supervisor	Vacant
DPHSS Sanitary Inspection Revolving Fund (5638A181740CE210)			
1	6226	EPHO I	Oriondo, Remiliza
Guam Prescription Drug Monitoring Program (5101H171740CE101)			
1	6050	Program Coordinator IV	Pinaula, Jeffrey S.

Table 2. Staffing pattern of the Division of Environmental Health at the end of FY 2018.

RESOURCES

CONTRACTUAL		
General Fund FY 2018		Expenditures
Xerox Corp	12mos Lease of Copier	\$11,008.56
American Printing	Printing Services (HC Cards)	\$3,459.00
Nissan Motors	BPA for Vehicle Maintenance	\$5,000.00
Guam Enterprise	BPA for Vehicle Maintenance	\$5,000.00
One Stop Auto Repair	BPA for Vehicle Maintenance	\$5,000.00
The Guam Daily Post	BPA for Advertising	\$1,500.00
Pacific Daily News	BPA for Advertising	\$1,500.00
GCC	Module 1 & III Procurement Class	\$624.00
Pacific Star Hotel	Hotel Venue for GEPHEM Training	\$8,000.00
American Printing	Printing of Business Cards	\$500.00
American Printing	Printing of Health Cert. Clearance	\$2,500.00
Signmakers	DEH Logo for outside signage	\$3,560.00
Best Aquatic	Registration fee for CPO	\$4,135.00
NEHA	Membership Renewal	\$3,735.00
Subtotal		\$55,521.56
Environmental Health Fund FY 2018		Expenditures
Xerox Corp	12mos Lease of Copier	\$16,765.08
FlameTree	Grounds Maintenance	\$10,200.00
FlameTree	Janitorial Services @ Central Office	\$7,200.00
Ideal Advertising	Supplemental Payment for prior year's services	\$13,890.00
Morrico	Maintenance and Fuel Supply for GEPHL Generator	\$5,245.00
Island Equipment	Production of Dry Ice	\$762.50
FlameTree	Janitorial Services @ GEPHL	\$12,491.57
American Printing	Printing Services	\$3,040.00
Action Printing	Printing Services	\$270.00
Copy Express	Printing Services	\$840.00
JV	JV for drug testing	\$40.00
Remy Suva	Petty Cash Replenishment	\$246.00
Subtotal		\$70,990.15
DPHSS SIRF FY 2018		Expenditures
Teleguam Holdings	Data Services for IPADs	\$7,682.85
American Printing	Printing Services	\$3,429.00
Copy Express	Printing Services	\$3,784.00
Saitech Solutions	Repairs of IBM Typewriter	\$160.00
Best Aquatic	Registration fee for CPO	\$1,707.64
Subtotal		\$16,763.49
GRAND TOTAL		\$143,275.20

Table 3. Contractual services obtained by the Division of Environmental Health in FY 2018.

SUPPLIES AND MATERIALS

A total of \$56,048.00 from the General Fund (\$7,164.00), EHF (\$42,140.00), and DSIRF (\$6,744.00) was appropriated in supplies and materials (**Table 4**). Items that were procured included office supplies (copy paper, ink, etc.), computer software (SmartDraw and Adobe Acrobat Pro), computer cables and cases for laptops issued to staff, bathroom supplies for DEH Central and GEPHL bathrooms, supplies for the mosquito program, swimming pool test kits, and books required for certification requirements.

RESOURCES

SUPPLIES		
General Fund FY 2018		Expenditures
Shell Guam	Fuel Charges	\$3,291.34
TENDA	Copier Paper	\$1,857.40
	SUBTOTAL	\$5,148.74
Environmental Health Fund FY 2018		Expenditures
TENDA	Office Supplies/Cleaning Supplies	\$6,535.20
DMR	Smart Draw 2018 (10ea)/Adobe Acrobat Pro 2017 (5ea)	\$5,925.00
AMBROS	Paper Towel/Toilet Tissue/Hand Soap	\$8,266.00
Graphic Center	Office Supplies	\$354.00
ComPacific	Surface Pro Case/Ethernet Cable/HDMI Splitter	\$865.61
Guam Modern Office Supply	Office Supplies	\$321.00
Standard Office Supplies	Office Supplies	\$181.28
Options PC Supplies	Office Supplies	\$2,500.00
	SUBTOTAL	\$24,948.09
DPHSS Sanitary Inspection Revolving Fund FY 2018		Expenditures
American Printing	Office Supplies	\$99.00
Marianas Electronics	12V 18AH Rechargeable Sealed Lead-Acid Batteries for BG-2 Sentinel Mosquito Trap	\$1,040.00
M.D. Wholesale	100LED UV Black Light Flashlight w/ UV Optics, Safety Glasses, FAS-DPD Test Kits	\$1,040.00
M.D. Wholesale	Swimming Pool Test Kits and Supplies	\$1,073.00
JMI/MD Wholesale	Microbiology Books	\$596.00
	SUBTOTAL	\$3,848.00
	GRAND TOTAL	\$33,944.83

Table 4. Supplies and materials procured by the Division of Environmental Health in FY 2018.

EQUIPMENT

Of the \$35,466.00 appropriated for Equipment in FY 2018, \$9,190.00 was expended. Appropriations came from one funding source, which was the DSIRF. Funds were used to purchase equipment, such as split unit air-conditioner, hand-held water activity meter, and a typewriter (Table 5).

EQUIPMENT		
DPHSS Sanitary Inspection Revolving Fund FY 2018		Expenditures
JMI Edison	Aqualab Portable Hand-Held Water Activity Meter	\$3,240.00
J&B Modern Tech	4-TON A/C Split Type Unit	\$5,200.00
Saitech Solutions	IBM Typewriter	\$750.00
	SUBTOTAL	\$9,190.00
	TOTAL	\$9,190.00

Table 5. Equipment procured by the Division of Environmental Health in FY 2018.

TRAVEL

There was \$30,014.00 appropriated for travel in FY 2018, and of this amount, \$19,669.32 (Table 6) was expended to send DEH personnel to attend various trainings, meetings, and conferences. Among the travel included sending three staff to attend the 2018 National Environmental Health Association Annual Education Conference in Anaheim, California for training and to renew their certifications, and the 2018 Pacific Island Health Officer Association Executive Board Meeting in Honolulu, Hawaii. Funding for all travel was from EHF.

RESOURCES

TRAVEL	
Environmental Health Fund FY 2018	Expenditures
Tom Nadeau; 2018 NEHA AEC; June 24 - 28, 2018; Anaheim, CA	\$3,644.65
Rosanna Rabago; 2018 NEHA AEC; June 24 - 28, 2018; Anaheim, CA	\$3,658.72
Tamera Shimizu; 2018 NEHA AEC; June 22 - 28, 2018; Anaheim, CA	\$4,612.65
Vener Raymundo; 2018 NEHA AEC; June 22 - 28, 2018; Anaheim, CA	\$4,612.65
Tom Nadeau; PIHOA Executive Board Meeting; September 3 - 8; Honolulu, HI	\$3,170.65
SUBTOTAL	\$19,699.32
TOTAL	\$19,699.32

Table 6. Off-island travel taken by the staff of the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

PROCESSING CENTER

The Processing Center Section (PCS) of the Division of Environmental Health issued 3,247 Sanitary Permits; 28,918 Health Certificates; 570 Guam Controlled Substances Registration Certificates; and 21 Disinterment and 8 Disinterment-Reinternment approvals in FY 2018.

SANITARY PERMITS

The Division of Environmental Health issued 3,247 Sanitary Permits (inclusive of temporary permits) in FY 2018, which equated to \$879,266.79 in generated revenue (**Table 7, Figure 1**). There were 15 fewer permits issued this year than in FY 2017 (decrease of less than 1%), and \$7.89 less in revenue, which is a decrease of less than 1% from last fiscal year. There were modest increases in the number of Sanitary Permits issued for Cosmetic Establishments, Hotel/Motels, Institutional Facility, Laundry and Dry-Cleaning Establishments, Public Swimming Pools, and Waste Water & Chemical Toilet Establishments.

SANITARY PERMIT ISSUANCE		
Category	*Number of Issuances	Revenue
Cosmetics Establishment	223	\$61,499.98
Eating and Drinking Establishment	1,557	\$372,285.50
Food Establishment	998	\$298,140.04
Hotel/Motel	140	\$31,827.50
Institutional Facility	131	\$54,284.59
Laundry and Dry-Cleaning Establishment	86	\$26,344.17
Public Swimming Pool	111	\$34,385.01
Solid Waste	0	\$0.00
Waste Water & Chemical Toilet Establishment	1	\$500.00
TOTAL	3,247	\$879,266.79

Table 7. Sanitary Permits issued by the Division of Environmental Health in FY 2018. (*Includes new, renewal, temporary, and duplicate.)

DISTRIBUTION OF SANITARY PERMITS ISSUED (FY 2018)

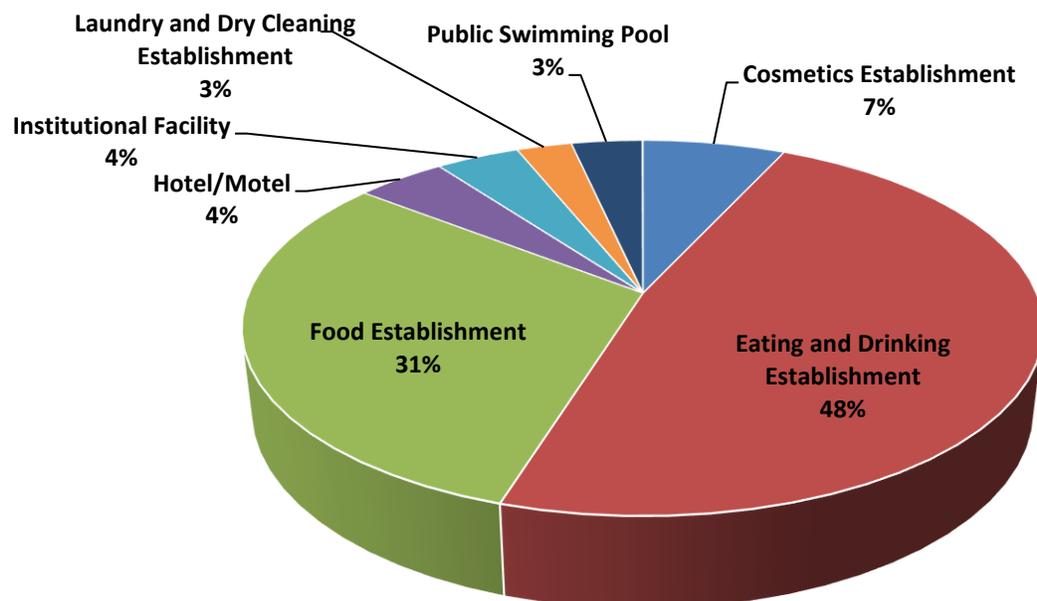


Figure 1. Distribution (%) by Category of Sanitary Permits issued by Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

HEALTH CERTIFICATES

A total of 28,918 Health Certificates (**Table 8**) were issued by the Division in FY 2018. This resulted in \$495,548.00 in generated revenue, which was \$190,981.00 more than what was collected in FY 2017; an increase of 63%. The additional revenue is attributed to the revenue collected from the Food Safety Health Certificate Training Courses. These courses are now required of all applicants seeking a Health Certificate for their employment in food facilities, which is an additional \$15.00 per application.

HEALTH CERTIFICATE ISSUANCE		
Type	Number of Issuances	Revenue
New	943	\$9,415.00
Interim	7,147	\$160,600.00
Interim-Lapsed	3,598	\$82,410.00
New Manager's Certification	168	\$1,680.00
Renewal (All categories)	10,970	\$109,868.00
Renewal Interim Food Facility (FFAC)	5,198	\$127,770.00
Amendment	8	\$40.00
Temporary (FFAC Only)	132	\$1,980.00
Re-Issuance	720	\$1,442.00
Interim Re-Issuance FFAC	34	\$343.00
TOTAL	28,918	\$495,548.00

Table 8. Health Certificates issued by the Division of Environmental Health in Fiscal Year 2018.

DISINTERMENT AND DISINTERMENT - REINTERMENT CLEARANCES

DEH reviewed and approved 21 Requests for Disinterment and 8 Requests for Disinterment-Reinterment (**Table 9**). This was two fewer requests for Disinterment than in FY 2017, and two fewer requests for Disinterment-Reinterment. Disinterment involves the removal of remains from a grave or tomb for disposition to another location; Disinterment-Reinterment occurs when the remains are exhumed and then returned to the original grave or tomb, often with a second set of remains (i.e., recently deceased family member).

DISINTERMENT and DISINTERMENT/REINTERMENT ISSUANCE			
Category	No.	Disinterment	Interment
Disinterment	2	Guam Memorial Cemetery	Guam Memorial Park
	1	Guam Memorial Cemetery	Our Lady of Peace Memorial Gardens
	2	Guam Veteran's Cemetery	Guam Veterans Cemetery
	1	Guam Veteran's Cemetery	Washington, USA
	2	Mt. Carmel Catholic Cemetery	Our Lady of Peace Memorial Gardens
	1	Our Lady of Peace Memorial Gardens	Cremation River Garden, Washington USA
	1	Pigo Cemetery	Ada's Mortuary, Inc.
	1	Pigo Cemetery	Pigo Cemetery
	1	Taguag Memorial Cemetery	Ada's Mortuary, Inc.
	1	Taguag Memorial Cemetery	Pigo Cemetery
	1	Tiguac Cemetery	Our Lady of Peace Memorial Gardens
	2	Togcha (Holy Cross)	Guam Memorial Park
	1	Togcha (Holy Cross)	Togcha (Holy Cross)
	3	Vincente Limtiaco Cemetery, Nimitz Hill	Guam Memorial Park
1	Vincente Limtiaco Cemetery, Nimitz Hill	Makati City Metro Manila, Philippines	
Disinterment/Re-Interment	1	Our Lady of Peace Memorial Park	Olop Memorial Park
	5	Pigo Cemetery	Pigo Cemetery
	1	Togcha (Holy Cross)	Togcha (Holy Cross)
	1	Vincente Limtiaco Cemetery, Nimitz Hill	Vincente Limtiaco Cemetery, Nimitz Hill

Table 9. Disinterment and Disinterment-Reinterment approvals issued by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

CONTROLLED SUBSTANCES REGISTRATION CERTIFICATES

Five hundred seventy (570) Guam Controlled Substances Registration Certificates (GCSR) were issued in FY 2018 (**Table 10**), which was 14 certificates fewer than what was issued in FY 2017. The revenue collected this fiscal year was \$191,230, a difference of \$113,860 more than what was collected in FY 2017 (147% increase). The dramatic increase was due to the adoption of the new fee schedule that became effective in January 2018. The new fee schedule was necessary so that DEH may recruit staff to manage the Controlled Substances Program to conduct drug diversion investigations. The revenue generated, before the adoption of the new fee schedule was insufficient to hire personnel and fund the annual maintenance fees of the software programs used by the Guam Prescription Drug Monitoring Program and the issuance of GCSR.

CONTROLLED SUBSTANCES REGISTRATION ISSUANCE							
Category	Number of CSR Issued					Number of CSR Issued Per-Category	Revenue
	New	Renewal	Exemption	Amendment/Temporary	Re-Issuance		
Advanced Practice Nurse/Nurse Practitioner	25	20	1	2	0	48	\$18,790.00
Doctor of Dental Medicine (DMD)	1	9	0	0	0	10	\$3,020.00
Doctor of Dental Science (DDS)	4	38	0	2	0	44	\$12,620.00
Doctor of Medicine (MD)	87	274	0	5	1	367	\$122,330.00
Doctor of Osteopathic Medicine (DO)	8	13	0	1	0	22	\$7,200.00
Doctor of Veterinary Medicine (DVM)	2	6	0	2	0	10	\$3,670.00
Doctor of Podiatric Medicine (DPM)	4	5	0	0	1	10	\$2,420.00
Physician's Assistant (PA)	3	13	0	0	0	16	\$5,910.00
Animal Shelter	0	1	0	0	0	1	\$500.00
Hospital	0	3	0	1	0	4	\$1,510.00
Clinic	0	3	0	0	0	3	\$1,500.00
Researcher	1	0	0	0	0	1	\$500.00
Pharmacy	0	28	0	1	0	29	\$9,860.00
Wholesale	0	5	0	0	0	5	\$1,400.00
TOTAL	135	418	1	14	2	570	\$191,230.00

Table 10. Controlled Substances Registrations issued by the Division of Environmental Health in FY 2018.

ADMINISTRATIVE PENALTIES

In FY 2018, there were 11 administrative penalty cases that were initiated by the Division (**Table 11**). A total of \$1,800 in fines was collected from establishments that had employed individuals who did not possess valid Health Certificates while working in these regulated establishments. This was an increase of three cases, but the monetary penalty collected remained the same as FY 2017 since two establishments failed to pay their monetary penalty by the end of the fiscal year. Most violations originated from Food Establishments, followed by Cosmetic Establishments, and then Laundry and Dry-Cleaning Establishments. All funds collected from administrative penalties were deposited into the General Fund.

CONSUMER COMMODITIES

The Consumer Commodities Program (CCP) of DEH responded to all detainments made by Guam Customs and Quarantine Agency (GCQA) at the island's ports of entry. A total of 43 detainments were examined this fiscal year (**Table 12**); this was 29 more detainment reviews than FY 2017, an

ACCOMPLISHMENTS

increase of 207%. DEH did not conduct any active enforcement at retail establishments because of other competing priorities and limited resources.

ADMINISTRATIVE PENALTY ASSESSMENTS				
No.	Establishment	Category	Amount Assessed	Amount Collected
1	Health Craze	Food Establishment	\$200	\$200
2	Cold Stone Creamery	Food Establishment	\$200	\$200
3	Long Xing Chinese Restaurant	Food Establishment	\$200	\$200
4	Ajisen Ramen (GPO)	Food Establishment	\$200	-
5	Old Town Chinese Restaurant II	Food Establishment	\$200	-
6	Top Island Restaurant	Food Establishment	\$200	\$200
7	Harmon Loop Hotel Laundry	Laundry and Dry-Cleaning Establishment	\$200	\$200
8	J Nail	Cosmetic Establishment	\$200	\$200
9	Horse & Cow	Food Establishment	\$200	\$200
10	Hair Line (The)	Cosmetic Establishment	\$200	\$200
11	JM Laundromat	Laundry and Dry-Cleaning Establishment	\$200	\$200
TOTAL MONETARY FEES COLLECTED				\$1,800

Table 11. Administrative penalties processed by the Division of Environmental Health in FY 2018.

CONSUMER COMMODITIES	
Number of FOOD Inspections and Investigations	
Commercial Importation Cases	10
Personal Importation Cases	3
Retail "Tagging" Cases	0
Subtotal	13
Number of DRUG Inspections and Investigations	
Commercial Importation Cases	13
Personal Importation Cases	3
Retail "Tagging" Cases	0
Subtotal	16
Number of COSMETIC Inspections and Investigations	
Commercial Importation Cases	6
Personal Importation Cases	2
Retail "Tagging" Cases	0
Subtotal	8
Number of MEDICAL DEVICE Inspections and Investigations	
Commercial Importation Cases	0
Personal Importation Cases	0
Retail "Tagging" Cases	0
Subtotal	0
Number of HAZARDOUS SUBSTANCE Inspections and Investigations	
Commercial Importation Cases	2
Personal Importation Cases	3
Retail "Tagging" Cases	0
Subtotal	5
Number of OTHER NON-REGULATED CATEGORY Inspections and Investigations	
Commercial Importation Cases	0
Personal Importation Cases	1
Retail "Tagging" Cases	0
Subtotal	1
GRAND TOTAL	43

Table 12. Number of inspections and investigations of regulated consumer commodities conducted by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

- FOOD**

Thirteen of the 43 total detainments received from Guam Customs and Quarantine Agency in FY 2018 involved food items, which included coconut oil, dried soybeans, banana chips, clams, oysters, juices, and probiotics. A total of 2,529 pieces of food (535 pcs.) and food/drug combination (1994 pcs.) commodities were detained in the fiscal year. Of the 13 food-related detained shipments, ten were commercial importations, and three were for personal use. The commercial consignees were San Jose Investments LLC, Izzie Marketing, Phil MD Guam, Odilon Roque, Quality Distributors, Melvin Brillantes, LCG Corporation, Lolita Michael, Eunice Devera, and Yan’s Corporation. These detainments originated from the Philippines, South Korea, Japan, Palau, Taipei, and Hong Kong. Ten detainments were forfeited by the importers, while one was released and two were carried over into FY 2019 for further action.

There were 66 total voluntary recalls by the U.S. Food and Drug Administration and the U.S. Department of Agriculture for food commodities that were acted upon by DEH this fiscal year (**Table 13**). Of these recalls, a total of 3,038 pieces of food were found on the island; 1,455 were removed from store shelves while the remaining 1,583 had been sold to consumers. No deaths or injuries were reported to DEH that were linked to any of the recalled items.

Active inspection of food products at retail establishments was not performed this fiscal year due to a lack of staff and resources.

Voluntary Recalls by US Food and Drug Administration													
USFDA	No. of Recalls Acted Upon	Type of Activity Conducted							Findings				
		Email	Fax	Hand Delivered	Phone Calls	Inspections	Tag (No. Pieces)	Press Release Issued	No. On Island	Account-ed	Re-moved	Sold	Re-turned
Food	42	1,512	0	0	0	0	0	2	3,038	3,038	1,455	1,583	0
Drug	32	1,953	4	4	4	0	0	0	0	0	0	0	0
Cosmetic	1	36	0	0	0	0	0	0	0	0	0	0	0
Medical Device	17	709	0	0	0	0	0	0	0	0	0	0	0
Voluntary Recalls by US Dept. of Agriculture													
USDA	No. of Recalls Acted Upon	Type of Activity Conducted							Findings				
		Email	Fax	Hand Delivered	Phone Calls	Inspections	Tag (No. Pieces)	Press Release Issued	No. On Island	Account-ed	Remov-ed	Sold	Return-ed
Food	24	864	0	0	0	0	0	1	0	0	0	0	0

Table 13. Voluntary recalls by U.S. Food and Drug Administration and U.S. Department of Agriculture acted upon by the Division of Environmental Health in FY 2018.

- DRUG**

There were 16 (out of the 43 total) detentions in FY 2018 that were drug products or a combination of drug/food or drug/cosmetic commodities. These detainments included

ACCOMPLISHMENTS

whitening soaps and lotions, facial creams, facial toners, cleansers, slimming juices, skin lighteners, human medications, and animal/veterinary drugs, such as cyanocobalamin. The items were imported from the Philippines, South Korea, and Hong Kong. Thirteen were imported for commercial use and three were imported for personal use.

A total of 8,018 pieces of drug commodities were detained, resulting in 17 forfeitures; three other cases were carried over into FY 2019. One of the detainments resulted in a refusal of admission, and one non-DEH regulated drug commodity was referred to another agency. There were no releases of drug commodities in FY 2018.

There were 32 voluntary recalls for drug commodities that were acted upon by DEH this fiscal year. No recalled items were found on the island.

Active inspection of drug products at retail establishments was not performed this fiscal year due to a lack of staff and resources.

- ***COSMETIC***

Of the 43 detained shipments received in FY 2018 from GCQA, eight detentions were cosmetic or drug/cosmetic combination articles. The cosmetic products included whitening soaps and lotions, facial creams and toners, cleansers, and skin whiteners.

Six cosmetic detentions were commercial importations by San Jose Investments LLC; JunivCorp (Valencia Wholesale and Retail); Luz Domacena; Elvira Calbang; Espino LLC (Ben N Yan); and Izzie Marketing. The detainments were imported from the Philippines and South Korea.

A total of 5,137 pieces of cosmetic and drug/cosmetic commodities were detained. All cosmetic-related detainment cases were addressed and closed. There were no pre-importation clearances or refusals. All eight cosmetic related detentions resulted in forfeitures.

There was one voluntary recall involving cosmetic commodities that were acted upon by DEH this fiscal year. No recalled items were found on the island.

Active inspection of cosmetic products at retail establishments was not performed this fiscal year due to a lack of staff and resources.

- ***MEDICAL DEVICE***

There were no detentions at ports of entry by GCQA involving medical devices, and no cases were carried over to FY 2019. Additionally, there were no pre-importation clearances, releases, or refusals for such commodities.

There were 17 recalls involving medical devices that were acted this fiscal year; no recalled items were found on the island.

Active inspection of medical device products at retail establishments was not performed this fiscal year due to a lack of staff and resources.

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- ***HAZARDOUS SUBSTANCE***

There were five detentions of imported retail hazardous substances in FY 2018. These shipments included plastic balloons and toy figurines. The shipments originated from the Philippines, Hong Kong, and China. Three of the detained shipments were forfeited, one shipment was released, and one shipment is pending resolution and carried over to FY 2019.

Of the five detained shipments, two were commercial importations, and three were personal importations, one of which was released to the consignee. A total of 916 pieces of retail hazardous substance commodities were detained. There were no pre-importation clearances or refusals.

DEH did not conduct any recall checks related to hazardous substances this fiscal year. Active inspection of retail hazardous substance products at retail establishments was not performed this fiscal year due to a lack of staff and resources.

CONTROLLED SUBSTANCES PROGRAM

The proposed *Rules Governing the Manufacture, Distribution, and Dispensing of Controlled Substances* were officially adopted on January 21, 2018 after 90 days had lapsed with no action taken by the Guam Legislature. The promulgated rules updated the fee schedule for the issuance of Guam Controlled Substances Registration.

The Guam Superior Court case related to the 2013 drug investigation, which resulted in the seizure of several controlled and non-controlled drugs, finally concluded FY 2018. During FY 2015, DEH attended several hearings at the Superior Court of Guam to witness and/or participate in the case relative to the return of the seized items. In FY 2016, the Guam Superior Court entered findings of fact, conclusions of law, and a judgment that resulted in the forfeiting of the unlawfully possessed controlled substances by the registrant. However, the decision was appealed to the Supreme Court of Guam. During FY 2017 and FY 2018, the Supreme Court held several briefings that resulted in the return of the case back to the Superior Court for further proceedings. The Superior Court of Guam issued a Judgment and Notice of Entry on Docket on August 21, 2018, which brought closure to this case.

One pre-operational security inspection was conducted that involved the relocation of a pharmacy. There were no complaints received by DEH for any violations of the Uniformed Controlled Substances Act, relative to pharmaceutical controlled substances in FY 2018.

GUAM PRESCRIPTION DRUG MONITORING PROGRAM

In January 2018, the Guam Prescription Drug Monitoring Program (PDMP) coordinated with Appriss Health Inc. to update the old and obsolete Guam PDMP database. The upgrade to Appriss' AWARDx platform was completed, and went live, on June 28, 2018, that resulted in over 100 searches of patient prescription history by island pharmacies and physicians that same day. The number of searches on that day exceeded the previous daily average of 55 prescription history searches. The upgrade enhanced the users' search capabilities and provided DEH more data analysis tools. The system is also more secure as it is hosted on the cloud by the vendor and

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monitored 24/7. The vendor, Appriss Health Inc., also provided 24/7 technical support, which was not available with the previous system.

On May 22, 2018, the PDMP Administrator and the Chief EPHO met with Special Agents of the United States Drug Enforcement Administration's Honolulu office. The meeting was an informal gathering to introduce the new head of the Honolulu DEA branch and discuss the support they can provide to Guam.

On September 28, 2018, the Division was awarded the 2018 Comprehensive Opioid Abuse Site-Based Program grant in the amount of \$512,759. This grant will fund additional data enhancement upgrades, maintenance, and support, and activities to collaborate with the Commonwealth of the Northern Marianas Islands (Saipan, Tinian, Rota) to integrate their pharmacies and physicians within the Guam PDMP database.

GUAM ENVIRONMENTAL PUBLIC HEALTH EDUCATION MONTH

The Division held its 3rd Annual Guam Environmental Public Health Education Month 2018 (GEPHEM) during September 2018 with the theme, *We're Making a Splash towards the Model Aquatic Health Code!* to focus on swimming pool sanitation and safety. The Department issued a press release on August 23, 2018 announcing the Proclamation Signing for the 2018 Annual Guam Environmental Public Health Education Month.

The goal of the 3rd annual GEPHEM was to educate the public and industry on the sanitary operation and safety of public swimming pools, wading pools, and spas using social media (Facebook, Instagram, and Twitter). The celebration began with the presentation of the signed proclamation by the Governor of Guam on August 28, 2018, which was officiated by Lieutenant Governor Ray Tenorio. DEH promoted the safe and sanitary operation of the island's swimming pool establishments through the posting of daily tips and weekly videos on DEH's social media accounts. DEH also co-hosted certification courses for its staff and private stakeholders from September 17-21, 2018: National Swimming Pool Foundation's Pool/Spa Operator (attended by 15 EPHOs and one ET I) and Certified Pool/Spa Inspector (attended by 3 EPHOs and one ET I). In addition, educational brochures and posters were distributed to swimming pool establishments attending the training.

HEALTH – REGULATED ESTABLISHMENTS

In FY 2018, PCS processed and issued 3,247 Sanitary Permits to various health-regulated establishments, while the Bureau of Inspection and Enforcement (BIE) recorded 3,062 permitted establishments. The differing number of Sanitary Permits issued and the number of establishments on file occurred because there can be multiple permits issued to the same establishment during one fiscal year, such as the issuance of a new and a temporary renewal Sanitary Permit for the same vendor of a temporary event (i.e., Chamorro Village Wednesday Night Market).

The Division conducted 1,170 compliance inspections of all types in FY 2018, an increase of 10% from the previous fiscal year. Legislative mandate requires DEH to inspect each establishment once every three months, which was not possible during the fiscal year because of an insufficient number of inspectors to conduct sanitation inspections. The Division's inability to conduct approximately 12,248 routine inspections in FY 2018 forced DEH to prioritize its inspections. Establishments categorized as high priority (such as those catering to highly-risk populations,

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including temporary food establishments) were inspected on multiple occasions during the year. Graphical presentations of sanitation inspection data for FY 2018 are provided in **Figures 2 - 4**.

The “Assessment” inspections, as shown in **Figure 3**, are evaluations that are usually conducted by DEH to determine the compliance status of an establishment and does not result in the issuance of a letter grade. Less than 15% of all inspections conducted in FY 2018 were assessments without letter grade issuance. This was a result of visits to facilities requesting follow-up inspections that were determined to be still non-compliant during the inspection. The majority of these establishments, such as food stall stands, were assessed after their Sanitary Permits were suspended due to imminent health hazards, such as pest infestation, or receiving a “D” rating. A large part of assessment activities involved evaluating facilities in determining if the pest infestation was still ongoing. As presented in **Figure 4**, 36% of establishments that received no letter grade were due to a combination of assessments and situations where a letter grade was not issued.

- **FOOD FACILITIES**

There was a total of 2,555 Sanitary Permits issued to food facilities (Eating and Drinking Establishments and Food Establishments) in FY 2018 by the Processing Center Section, which was almost four times (2,555 vs. 692) the number issued for all other categories combined, and it accounted for 78% of all health-regulated establishments permitted by DEH. Food facilities were given higher priorities over other regulated establishments by DEH for sanitation inspections because of the greater potential for disease outbreaks to originate from these establishments. There were no foodborne illness outbreaks linked to any regulated food facility reported to DEH in FY 2018.

- **EATING AND DRINKING ESTABLISHMENTS**

Eating and Drinking Establishment (E&DE) category, which are retail food facilities, had the greatest number of Sanitary Permits issued among food facilities in FY 2018 with 1,557, which comprised 48% of all Sanitary Permits issued during the fiscal year. A total of 541 inspections were performed by DEH in this category (**Table 14, Figure 5**) and it was also the most inspected amongst all health-regulated establishments during the fiscal year. The 541 inspections of this category made up 46% of all inspections DEH conducted in FY 2018. Temporary Food Service Establishments was the most inspected subcategory of Eating and Drinking Establishments during the year with 204 inspections conducted, which represented 38% of all inspections within the category. This was followed by restaurants with 173 inspections (32%), and food stall stands with 64 inspections (12%).

- **FOOD ESTABLISHMENTS**

There were 998 Sanitary Permits issued for Food Establishments (FE), which are food manufacturers, grocery stores, and food warehouses, in FY 2018. DEH performed a total of 165 inspections in this category (**Table 15, Figure 6**), which is a 150% increase from the previous year of 66 inspections. Sixty-five percent (107 inspections) were of retail grocery stores; this was followed by the manufacturer category at 15% or 25 inspections. Food warehouse and bakery categories were 8% (13) and 7% (12), respectively, of the overall FE inspections. The Division was able to inspect about 12% (110) of the 955 retail food establishments permitted for FY 2018.

DISTRIBUTION OF SANITATION INSPECTIONS

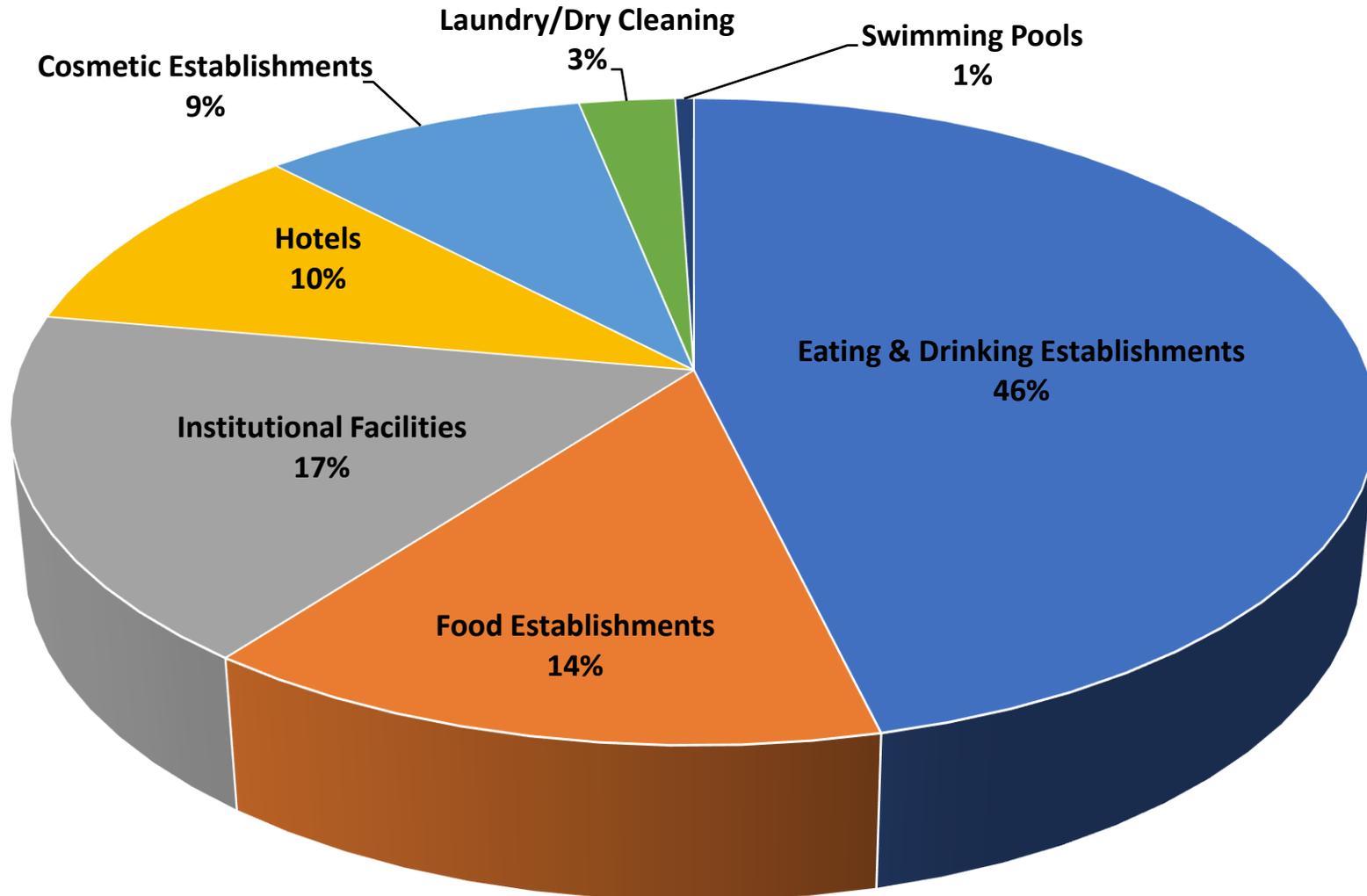


Figure 2: Distribution (%) of sanitation inspections of regulated establishments by the Division of Environmental Health in FY 2018.

TYPES OF SANITATION INSPECTIONS

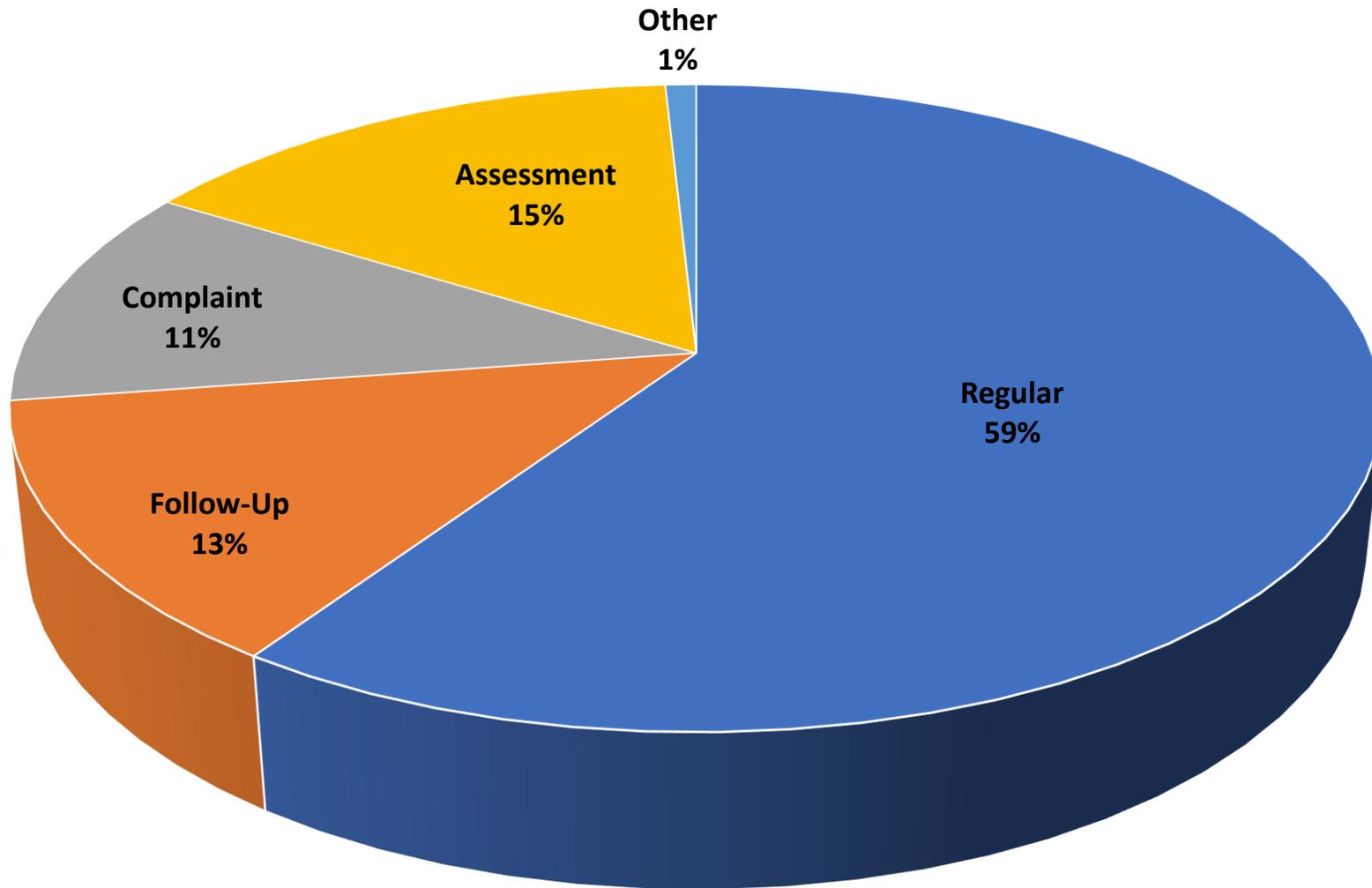


Figure 3. The types (%) of sanitation inspections conducted by the Division of Environmental Health in FY 2018.

INSPECTION LETTER GRADE ISSUANCES

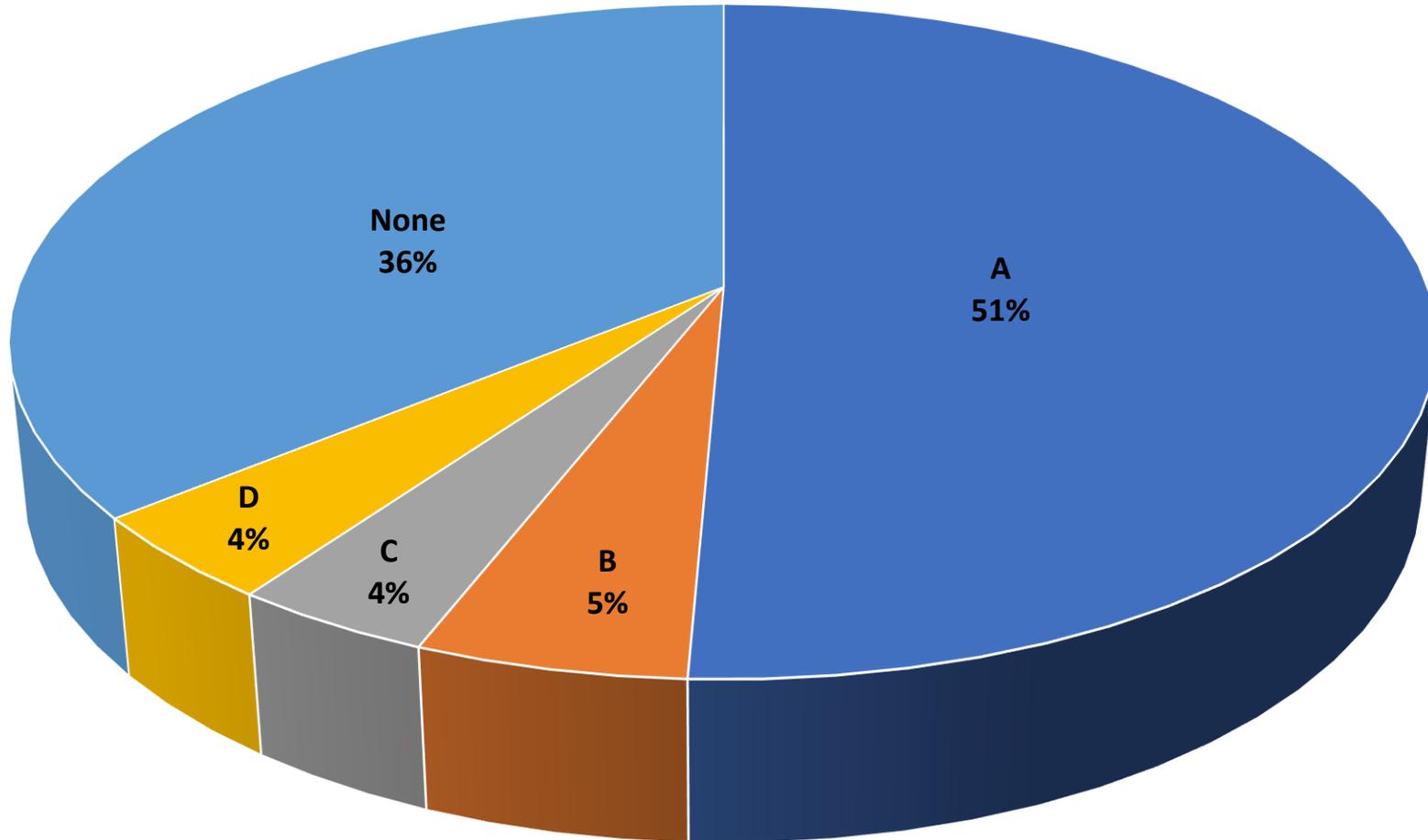


Figure 4. The inspection grades (%) issued to regulated establishments by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

Eating & Drinking Establishment	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspections Conducted	Types of Inspections					Letter Grade Issued					Number of Investigations Conducted	Number of Est. Closures
					Number of Regular	Number of Follow-Up	Number of Complaint	Assessments	Other	A	B	C	D	None		
Bar	129	2	2%	6	1	1	2	2	0	3	1	0	0	2	0	0
Café	5	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Cafeteria	17	5	29%	26	10	3	13	0	0	13	0	0	13	0	0	0
Catering	49	6	12%	12	4	4	3	1	0	9	1	1	0	1	0	0
Coffee Shop	56	8	14%	12	3	4	2	3	0	5	1	1	1	4	0	1
DOC Cafeteria	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Drink Stand	24	3	13%	5	0	2	3	0	0	3	1	1	0	0	0	0
In Plant Employee Eating Establishment	13	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Lunchroom	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Main Kitchen	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Food Service Establishment	93	14	15%	14	3	0	0	11	0	0	0	0	0	14	0	1
Restaurant	474	87	18%	173	12	49	54	57	1	61	11	16	24	61	0	21
Sandwich Stand	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
School Cafeteria	51	9	18%	13	10	2	1	0	0	11	2	0	0	0	0	0
Short Order Establishment	17	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Soda Fountain	21	4	19%	4	3	0	0	1	0	3	0	0	0	1	0	0
Stall Stand	94	38	40%	64	16	9	10	29	0	22	4	5	4	29	0	5
Tavern	33	2	6%	4	0	2	2	0	0	2	0	1	1	0	0	1
Temporary Food Service Establishment	319	172	54%	204	203	0	0	1	0	0	0	0	0	204	0	0
Vending-Food Stand	20	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Vending-Beverage Stand Machine	83	4	5%	4	2	2	0	0	0	4	0	0	0	0	0	0
TOTAL:	1502	354	24%	541	267	78	90	105	1	136	21	25	43	316	0	29

Table 14. Number of sanitation inspections and investigations of Eating and Drinking Establishments conducted by the Division of Environmental Health in FY 2018.

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Retail Food Establishment	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspections Conducted	Types of Inspections					Letter Grade Issued					Number of Investigations Conducted	Number of Est. Closures
					Number of Regular	Number of Follow-Up	Number of Complaints	Assessment	Other	A	B	C	D	None		
Bakery	56	6	11%	12	1	3	3	5	0	5	0	0	1	6	0	1
Bottling Plant	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Creamery	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Delicatessen	5	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish Processing	2	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Food Warehouse	130	6	5%	13	5	4	4	0	0	7	3	2	0	1	0	2
Fruit/Vegetable Market	2	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Ice Cream/Frozen Dessert Plant	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Ice Plant	2	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturer	252	15	6%	25	3	8	5	9	0	13	0	2	1	9	0	1
Poultry Processing Plant	11	2	18%	3	2	1	0	0	0	2	1	0	0	0	0	1
Processing Plant	7	3	43%	5	0	2	3	0	0	3	0	1	1	0	0	1
Public Market	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail	486	78	16%	107	26	16	11	54	0	39	7	3	3	55	0	4
TOTAL:	955	110	12%	165	37	34	26	68	0	69	11	8	6	71	0	10

Table 15. Number of sanitation inspections of Food Establishments conducted by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

EATING AND DRINKING ESTABLISHMENTS

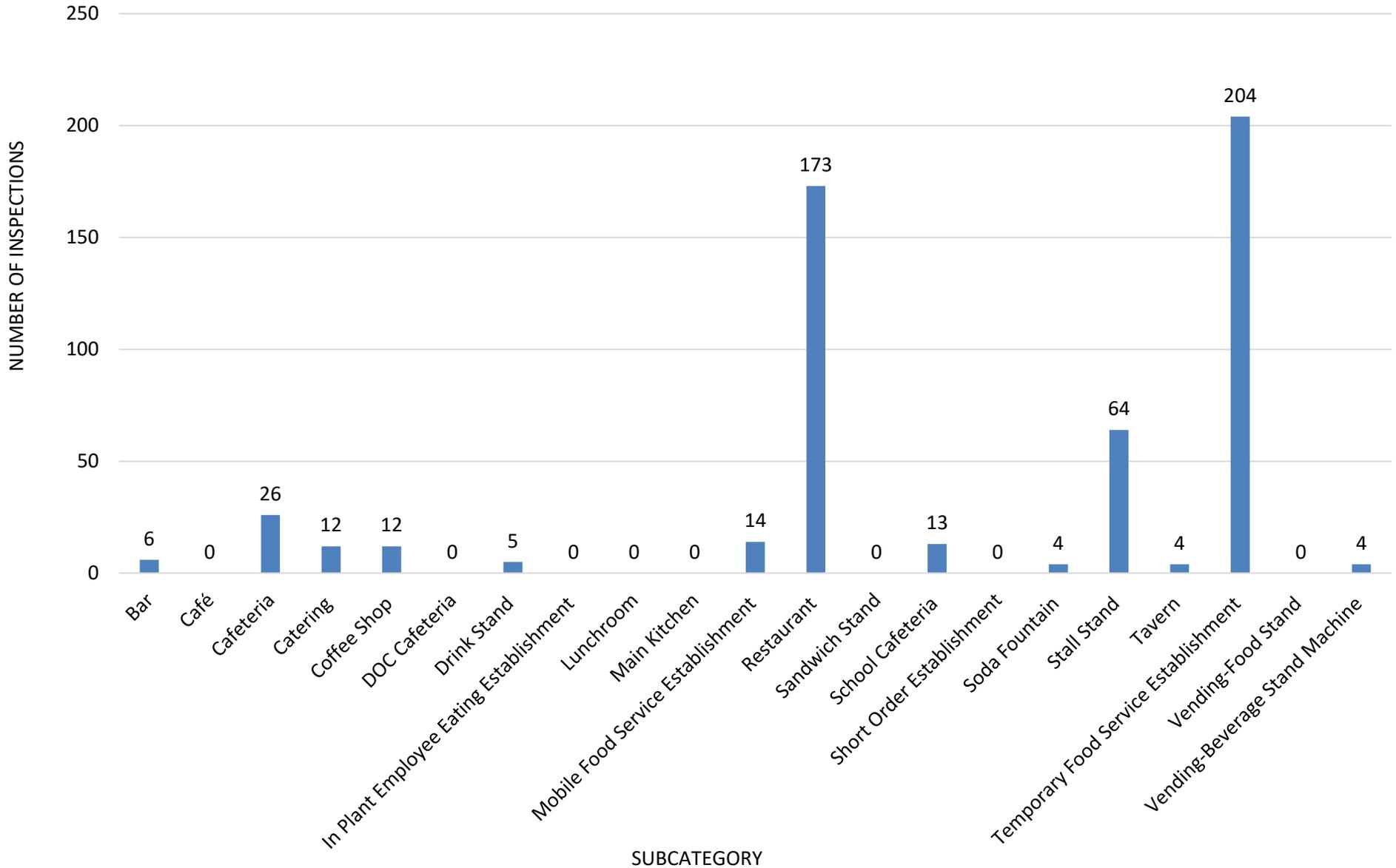


Figure 5. Number of sanitation inspections conducted of Eating and Drinking Establishments by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

FOOD ESTBALISHMENTS

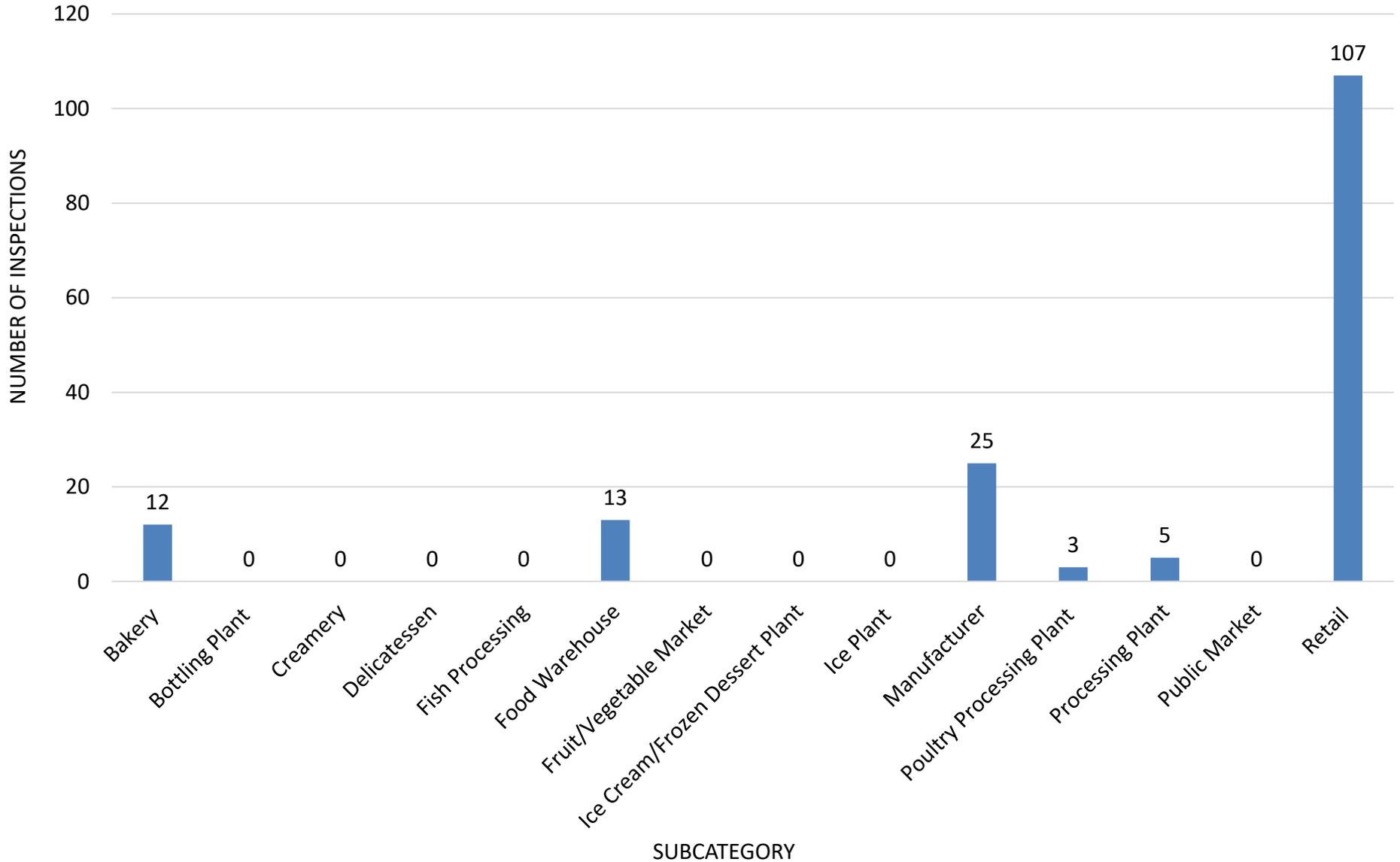


Figure 6. Number of sanitation inspections conducted of Food Establishments by the Division of Environmental Health in FY 2018.

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NON-FOOD FACILITIES

Non-food facilities regulated by DEH include Institutional Facilities, Hotels/Motels, Cosmetic Establishments, Laundry/Dry Cleaners, Public Swimming Pools, and Mortuaries. Collectively, 692 Sanitary Permits were issued to these 596 establishments in FY 2018, with 464 inspections conducted of 209 establishments. This is a decrease of 10% from FY 2017 in the number of inspections conducted. Institutional Facilities (44% of all non-food facility inspections) were inspected the most in this category during the fiscal year. This was followed by Hotel Establishments (25%) and Cosmetology Establishments (23%).

- ***INSTITUTIONAL FACILITIES***

Child care centers (77% of all institutional facility inspections) were inspected the most by the DEH within the category (**Table 16, Figure 7**). This was followed by group foster homes (9%), school buildings (8%), and family day care home (6%). Child care centers are inspected regularly as a result of the high priority given by DEH and the Bureau of Social Services Administration (BOSSA) of the Division of Public Welfare, which funds DEH personnel to conduct inspections of all childcare facilities on the island.

- ***HOTEL/MOTEL SANITATION***

DEH performed 118 inspections within the Hotel/Motel category in FY 2018 (**Table 17, Figure 8**). Most of these inspections were for Dormitory/Temporary Workforce Housing (92%) establishments. The DPHSS Sanitary Inspection Revolving Fund has allowed the recruitment of one inspector to conduct compliance inspections of all dormitories for temporary workers.

- ***COSMETIC ESTABLISHMENTS***

The number of inspections for category was 105 in FY 2018 (**Table 18, Figure 9**). Most of these inspections were for beauty salons (62%). This was followed by barber shops (17%), therapeutic massage establishments (11%), and tattoo shops (8%).

- ***LAUNDRY AND DRY-CLEANING ESTABLISHMENTS***

Low priority was given for inspections in this category. DEH performed a total of 31 inspections within the Laundry and Dry-Cleaning category (**Table 19, Figure 10**).

- ***PUBLIC SWIMMING POOLS***

Low priority was given for inspections in this category. DEH performed a total of six (6) inspections within the Public Swimming Pool category (**Table 20 and Figure 11**).

- ***EDIBLE GARBAGE FEEDING ESTABLISHMENT***

There were zero permitted establishments in this category in FY 2018; thus, no inspections were done during the fiscal year for this category, see **Table 21**.

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Institutional Facilities	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Child Care Center	39	39	100%	157	153	4	0	0	0	155	1	1	0	0	0	0
Family Day Care Home	3	3	100%	12	12	0	0	0	0	11	0	0	0	1	0	0
Group Day Care Home	2	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Group Foster Home	5	5	100%	19	19	0	0	0	0	18	1	0	0	0	0	0
Juvenile Detention Center	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Detention Center	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Correction Facility	0	0	0%	0	15	0	0	0	0	15	0	0	0	0	0	0
School Building	67	5	7%	16	0	0	0	0	0	0	0	0	0	1	0	0
Hospital	0	0	0%	0	0	0	0	0	1	0	0	0	0	0	0	0
Clinic	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Adult Day Care	6	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Mental Health Units	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursing Home	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory	0	0	0%	0	0	0	0	0	0	0	0	0	0		0	0
Total	123	52	42%	204	199	4	0	0	1	199	2	1	0	2	0	0

Table 16. Number of sanitation inspections and investigations of Institutional Facilities conducted by the Division of Environmental Health in FY 2018.

*The “Number of Establishments in Category” figure is calculated at the end of the fiscal year. During the year, day care establishments open and close for business, and inspections are conducted each quarter, which results in this table showing inspections for establishments which have closed during the year and are not included in the total, and in percentages greater than 100% in the “% of Establishments Inspected” column.

ACCOMPLISHMENTS

Hotel	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Hotel	36	3	8%	10	1	9	0	0	0	0	0	0	0	10	0	0
Dormitory	44	44	100%	108	102	2	0	0	4	96	7	1	0	4	0	0
Motel	4	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	84	47	56%	118	103	11	0	0	4	96	7	1	0	14	0	0

Table 17. Number of sanitation inspections and investigations of Hotel Establishments conducted by the Division of Environmental Health in FY 2018.

Cosmetic Establishment	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Cosmetology School	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Barber Shop	11	11	100%	18	11	5	2	0	0	11	6	1	0	0	0	0
Beauty & Barber	16	10	63%	2	1	1	0	0	0	2	0	0	0	0	0	0
Beauty Salon	84	52	62%	65	48	10	4	1	2	50	8	4	0	3	0	0
Massage Parlor	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Tattoo Shop	15	2	13%	8	1	2	1	3	1	2	1	1	0	4	1	1
Therapeutic Massage	74	9	12%	12	6	4	2	0	0	8	0	4	0	0	0	0
TOTAL	201	84	42%	105	67	22	9	4	3	73	15	10	0	7	1	1

Table 18. Number of sanitation inspections and investigations of Cosmetic Establishments conducted by the Division of Environmental Health in FY 2018.

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Laundry/Dry Cleaning	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Dry Cleaning	24	5	21%	5	4	0	0	1	0	3	1	0	0	1	0	0
Public Laundry	60	18	30%	26	18	3	3	1	1	17	5	1	0	3	0	0
TOTAL	84	23	27%	31	22	3	3	2	1	20	6	1	0	4	0	0

Table 19. Number of sanitation inspections and investigations of Dry-Cleaning and Laundry Establishments conducted by the Division of Environmental Health in FY 2018.

Swimming Pool	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Wading Pool	13	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Swimming Pool	91	3	3%	6	1	2	2	1	0	0	0	0	0	6	0	0
TOTAL	104	3	3%	6	1	2	2	1	0	0	0	0	0	6	0	0

Table 20. Number of sanitation inspections and investigations of Swimming Pools conducted by the Division of Environmental Health in FY 2018.

Solid Waste	Number of Est. in Category	Total Number of Est. Inspected	% of Est. Inspected	Total Number of Inspection Conducted	Type of Inspection					Letter Grade Issued						
					Number of Regular	Number of Follow-up	Complaint	Assessments	Other	A	B	C	D	None	Number of Investigation Conducted	Number of Est. Closures
Edible Garbage Feeding Establishment	0	0	0%	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 21. Number of inspections and investigations conducted of Edible Garbage Feeding Establishments conducted by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

INSTITUTIONAL ESTABLISHMENTS

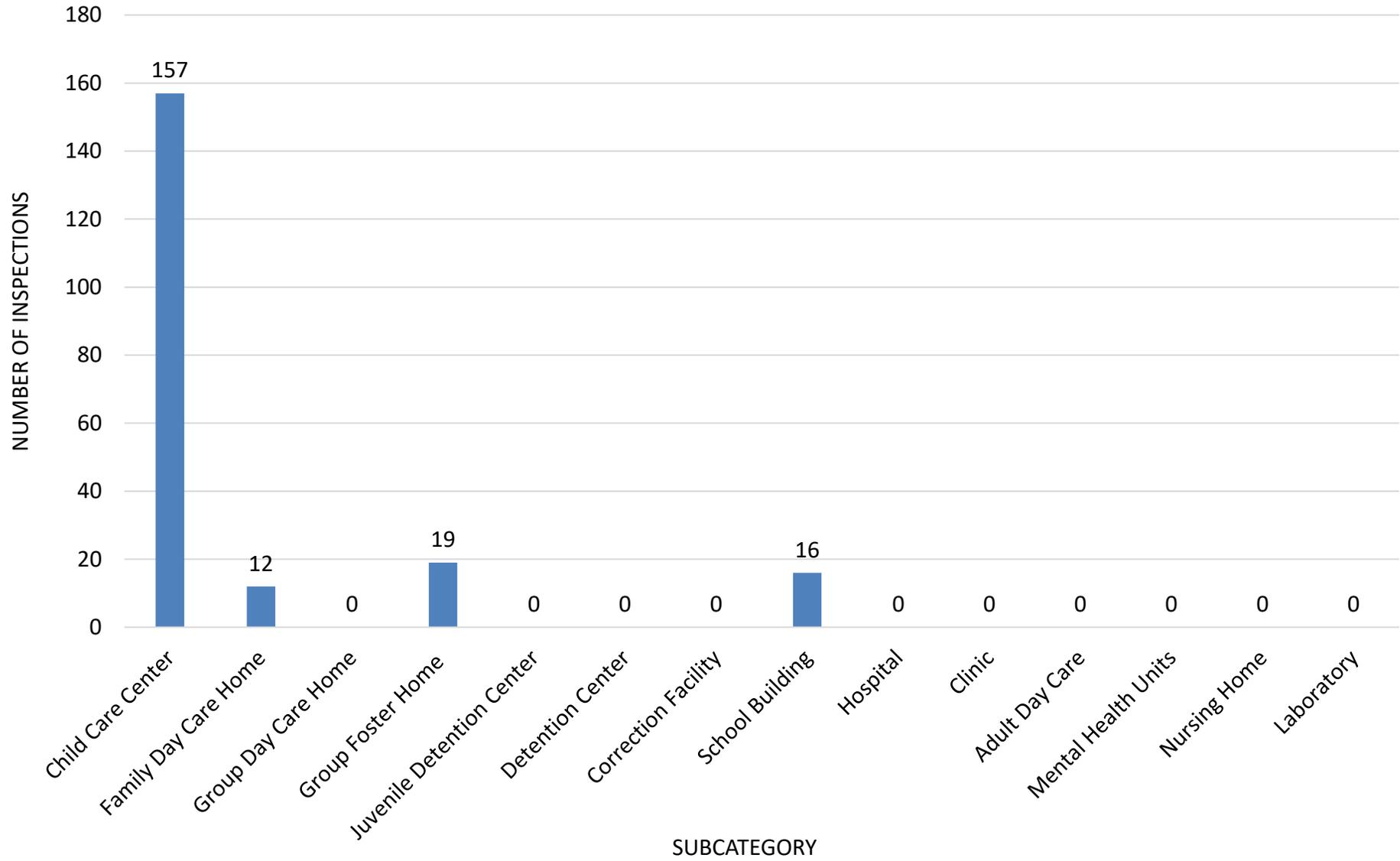


Figure 7. Number of sanitation inspections conducted of Institutional Facilities by the Division of Environmental Health in FY 2018.

HOTEL ESTABLISHMENTS

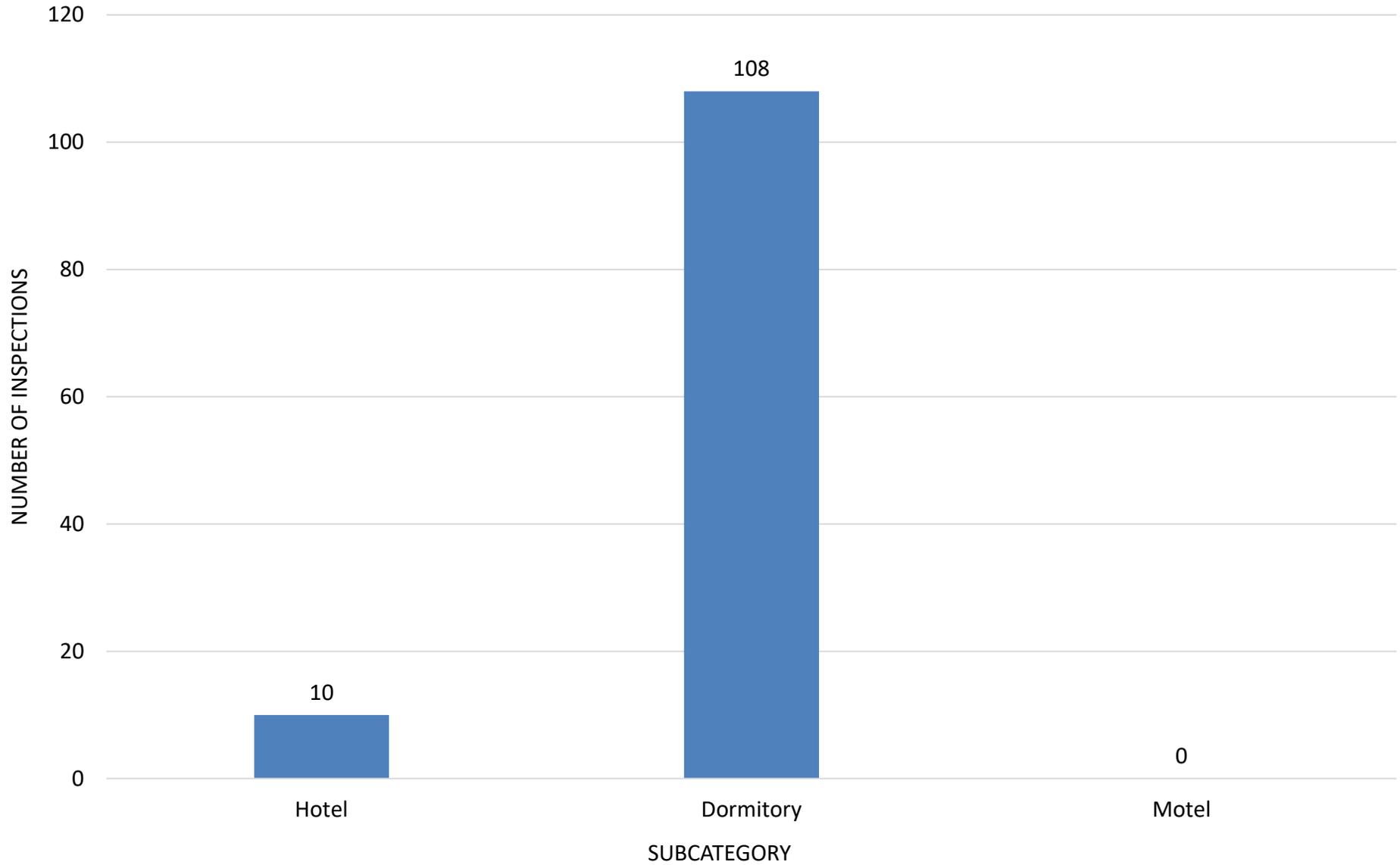


Figure 8. Number of sanitation inspections conducted of Hotel Establishments by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

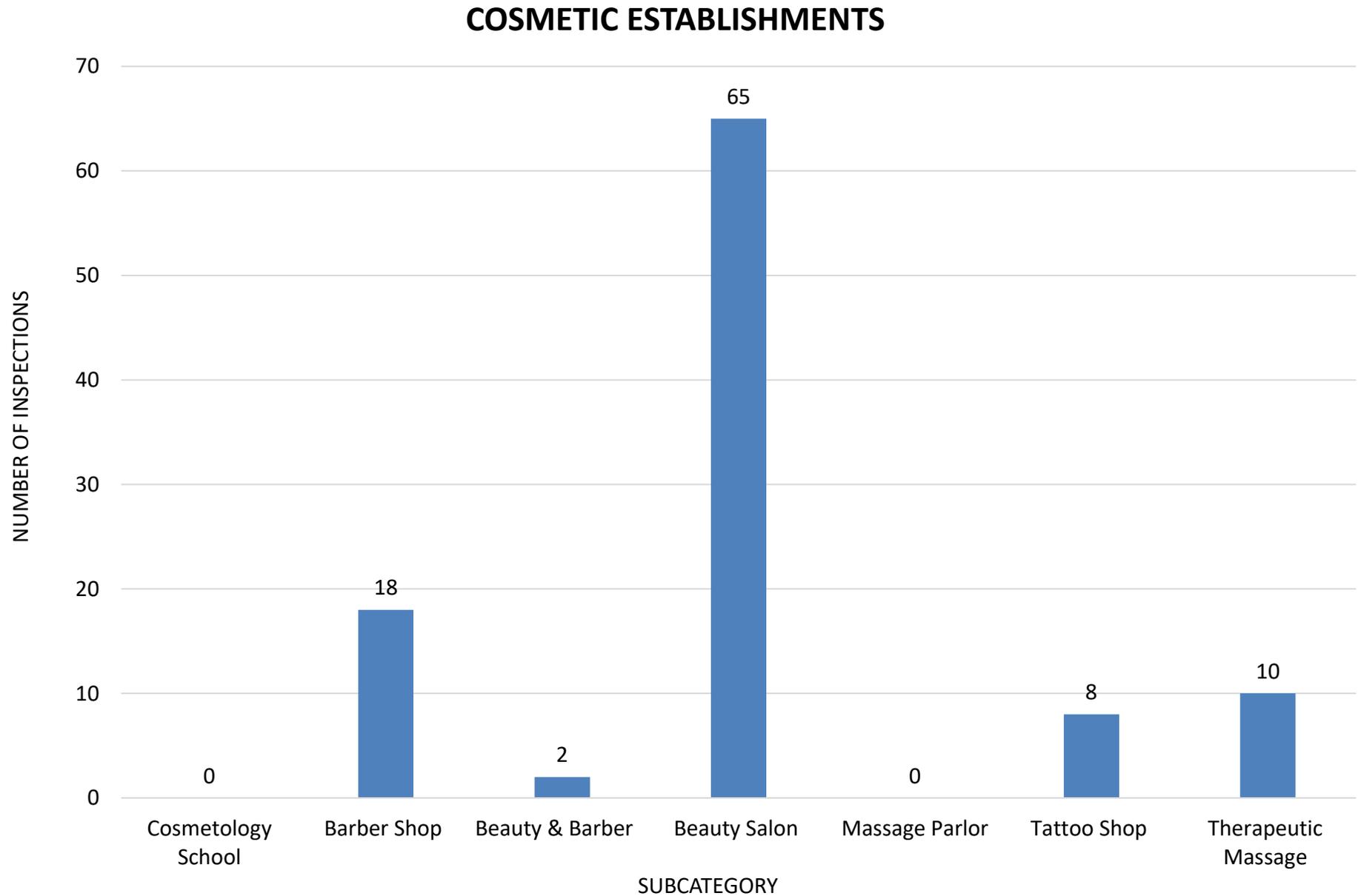


Figure 9. Number of sanitation inspections conducted of Cosmetic Establishments by the Division of Environmental Health in FY 2018.

LAUNDRY AND DRY CLEANING ESTABLISHMENTS

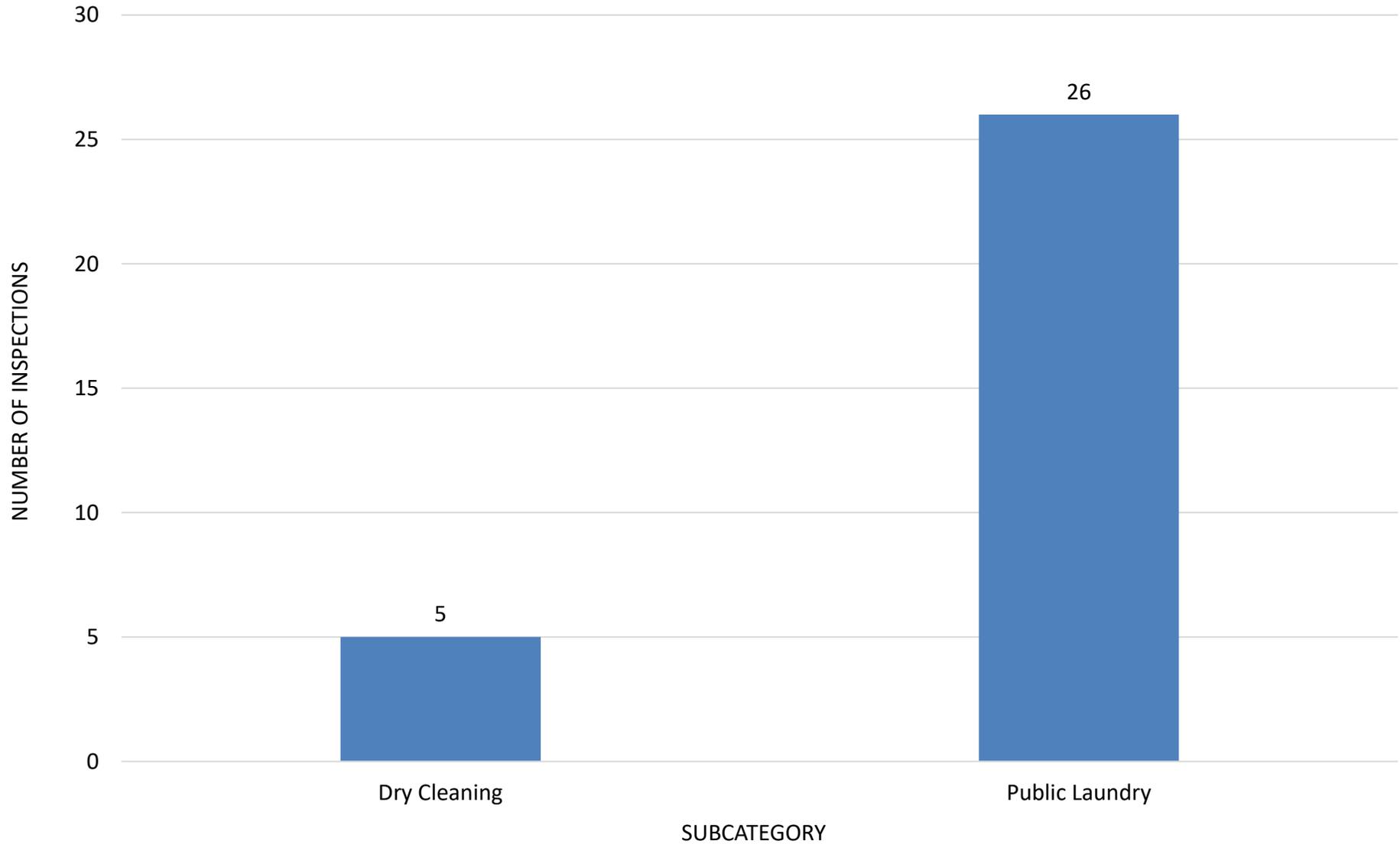


Figure 10. Number of sanitation inspections conducted of Dry-Cleaning and Laundry Establishments by the Division of Environmental Health in FY 2018.

ACCOMPLISHMENTS

SWIMMING POOL ESTABLISHMENTS

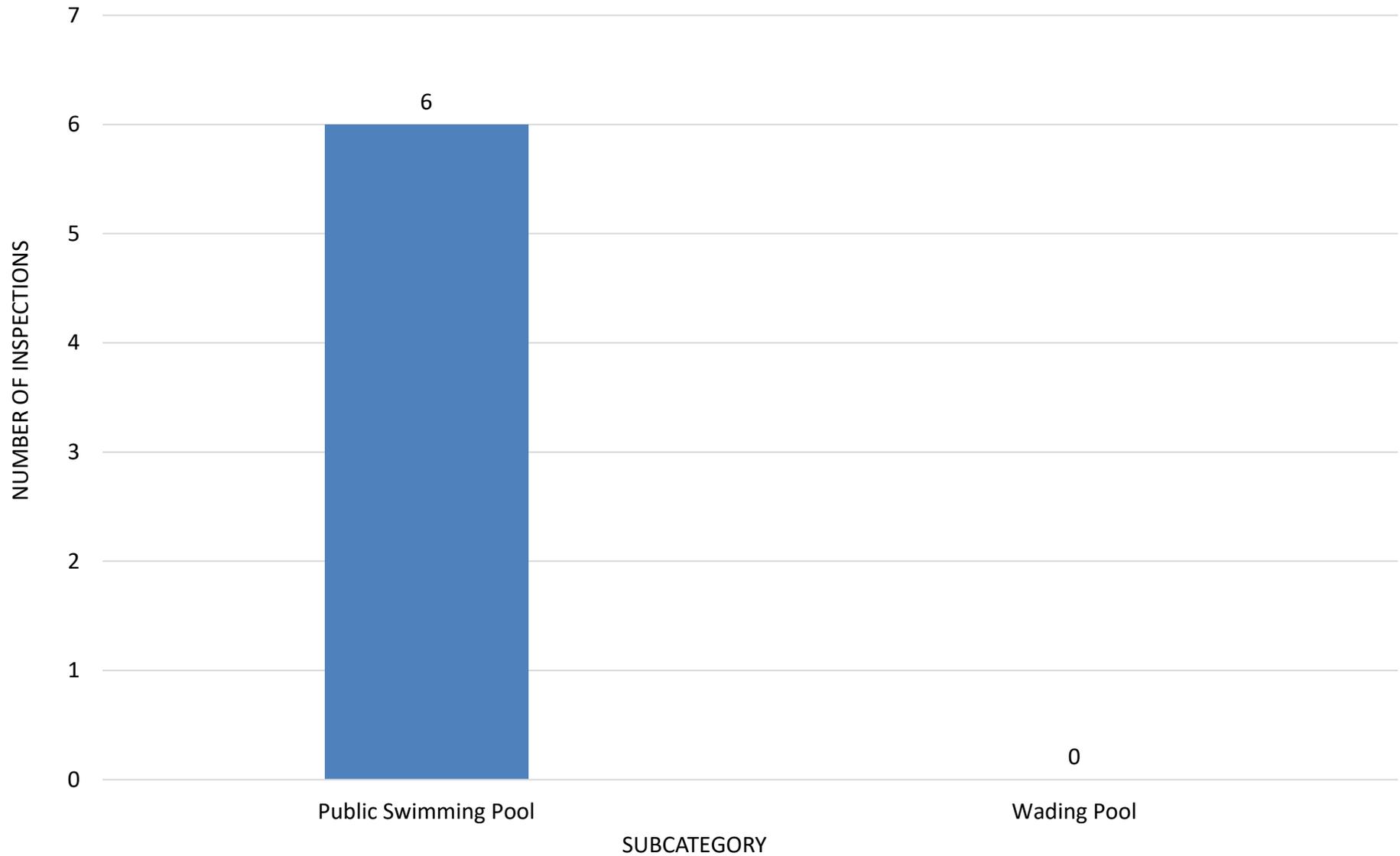


Figure 11. Number of sanitation inspections conducted of Swimming Pools by the Division of Environmental Health in FY 2018.

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- **MORTUARY**

The absence of rules and regulations for the regulatory control of mortuaries prevented DEH from permitting or inspecting these establishments that are operating on the island. The Division will attempt to initiate the development of regulations for mortuaries in FY 2019.

PLANS AND SPECIFICATIONS

The number of pre-operational (pre-op) inspections conducted by Plans & Specifications decreased by 6% in FY 2018 (**Table 22**) compared to last fiscal year, from 402 to 378. Two hundred and eighty pre-operational inspections were conducted in Fiscal 2018 of new establishments. Assessments, which are done to determine compliance on a less formal basis than a pre-operational inspection, represented less than 1% of the total pre-operational inspections conducted by the section. Business License clearances by DEH of regulated and non-regulated establishments comprised nearly 83% of all clearances conducted by Plans and Specifications. The section also reviewed 737 construction and floor plans, provided 1,422 consultations, and answered 352 phone inquiries in Fiscal Year 2018.

Complete data on the number of pre-operational inspections performed by DEH in FY 2018 for the different categories and subcategories are provided in **Table 23**.

PERMIT CENTER ACTIVITIES						
Number of Pre-Operational Inspections		Number of Business Clearances		Number of Plan Reviews	Number of Consultations	Number of Phone Inquiries
New Establishment	279	Business License (Non-HRE)	119	737	1,422	352
		Business License (HRE)	596			
Change of Ownership	57	Alcohol & Beverage License	65			
Renovation or Conversion	0	Childcare License	18			
Assessment	2	H-2 Workers License	29			
Occupancy	38	Contractor License	33			
Total	376	Total	860			

Table 22. Accomplishments of the Division of Environmental Health at the Permit Center in FY 2018.

COMMUNITY SERVICES

- **Cemeteries and Mortuaries**

There were no significant events in matters related to cemeteries and mortuaries that occurred this fiscal year. The Division did not witness any of the approved exhumation requests.

- **Radiological Health, Compressed Air, and Solid Waste**

One significant event occurred this fiscal year regarding radiological health. In light of the North Korean nuclear threats in FY 2018, Homeland Security issued guidance on sheltering in place should a nuclear attack occur. The California Department of Public Health (CDPH) had written a Nuclear Detonation Operations Plan (NDOP) to prepare for a nuclear detonation emergency, and three DEH staff attended the Pacific Interagency Environmental

ACCOMPLISHMENTS

Radiation Workgroup webinar that presented this planning document. The proposed “Regulations for the Licensing and Registration of Radioactive Materials and Other Sources of Ionizing Radiation” was drafted in FY 2018 and is pending supervisory review and approval. It is anticipated that approval for the final draft will be obtained in FY 2019.

PRE-OPERATIONAL INSPECTIONS						
Category & Subcategory		Type of Inspection				
		New	Change of Management	Assessment	Occupancy	Total
Eating & Drinking Establishments	Bar	10	0	0	0	10
	Cafeteria	1	0	0	0	1
	Catering	0	0	0	1	1
	Coffee Shop	9	0	0	5	14
	Drink Stand	7	2	0	0	9
	Restaurant	35	17	0	6	58
	Sandwich Stand	0	0	0	0	0
	Short Order Establishment	3	1	0	0	4
	Soda Fountain	4	0	0	1	5
	Stall Stand	3	8	0	1	12
	Tavern	2	0	0	0	2
	Mobile Food Service Establishment	24	0	0	0	24
	Temporary Food Service Establishment	0	0	0	0	0
	Vending Machine (Food)	0	0	0	0	0
	Vending Machine (Beverage)	4	2	0	0	6
		Subtotal	102	30	0	14
Institutional Facilities	Child Care Center	4	0	1	1	6
	Family Day Care Home	7	0	0	0	7
	Foster Family Home	0	0	0	0	0
	Group Day Care Home	3	0	0	0	3
	Group Foster Home	0	0	0	0	0
	Residential Treatment Facilities	0	0	0	0	0
	Adult Group Day Care Center	0	0	0	0	0
	Nursing Home	0	0	0	0	0
	Detention Center	0	0	0	0	0
	Correction Facility	0	0	0	0	0
	Juvenile Detention Center	0	0	0	0	0
	Hospital	0	0	0	0	0
	Clinic/Hospital	0	0	0	0	0
	School	0	0	1	7	8
	Subtotal	14	0	2	8	24

Table 23. Number of Pre-Operational Inspections conducted by the Division of Environmental Health in FY 2018 for each category (continued on next page).

ACCOMPLISHMENTS

PRE-OPERATION INSPECTIONS						
Category & Subcategory		Type of Inspection				
		New	Change of Management	Assessment	Occupancy	Total
Food Establishments	Bakery	8	0	0	1	9
	Beverage Plant	0	0	0	0	0
	Bottling Plant	0	0	0	0	0
	Confectionary	0	0	0	0	0
	Dairy	0	0	0	0	0
	Delicatessen	0	0	0	0	0
	Fish Processing Plant	0	0	0	0	0
	Food Refrigeration Plant	0	0	0	0	0
	Food Warehouse	16	0	0	1	17
	Fruit/Vegetable Market	0	0	0	0	0
	Ice Plant	0	0	0	0	0
	Manufacturer	38	1	0	0	39
	Meat/Poultry Market	0	0	0	0	0
	Packing House	0	0	0	0	0
	Public Market	0	0	0	0	0
	Retail	48	19	0	7	74
	Subtotal	110	20	0	9	139
Hotel	Hotel	3	0	0	3	6
	Motel	0	0	0	0	0
	Dormitory	12	0	0	0	12
	Subtotal	15	0	0	3	18
Cosmetic Establishments	Barber Shop	0	0	0	0	0
	Beauty Salon	6	1	0	1	8
	School of Cosmetology	0	0	0	2	2
	Massage Parlor	0	0	0	0	0
	Therapeutic Massage	5	6	0	0	11
	Tattoo Shop	6	0	0	0	6
	Subtotal	17	7	0	3	27
Swimming Pool	Public Swimming Pool	4	0	0	1	5
	Wading Pool	0	0	0	0	0
	Subtotal	4	0	0	1	5
Laundry & Dry Cleaning	Dry Cleaning Establishment	0	0	0	0	0
	Public Laundry	17	0	0	0	17
	Subtotal	17	0	0	0	17
Edible Garbage Feeding Establishment		0	0	0	0	0
GRAND TOTAL		279	57	2	38	376

(continued from previous page) Table 23. Number of Pre-Operational Inspection conducted by the Division of Environmental Health in FY 2018 for each category.

ACCOMPLISHMENTS

- **Wastewater and Toilet**

With the adoption of the “Rules and Regulations Governing Chemical Toilets” on September 17, 2017, DEH began the enforcement of these regulations in FY 2018. A letter to the island’s three chemical toilet operators informing them of the new regulations was issued on March 27, 2018. All three operators initially encountered delays in obtaining the necessary wastewater permits from the Guam Environmental Protection Agency, but eventually qualified in obtaining the required Chemical Toilet Permit after successfully passing DEH’s pre-operational inspections in FY 2018.

- **Compressed Air, and Solid Waste**

No referrals or complaints were received by DEH during this reporting period for compressed air, and no significant inspections or investigations transpired relevant to solid waste in FY 2018.

VECTOR CONTROL

- **Mosquito Surveillance and Control Program (MSCP)**

On September 28, 2018, DEH conducted the first organizational meeting of the Mosquito Advisory Council (MAC), which included Government of Guam agencies, military counterparts, and non-government organizations. The meeting, held at the Guam Environmental Public Health Laboratory (GEPHL), was convened to welcome new attendees and members; provide updated information regarding the recent MSCP surveillance and laboratory activities at GEPHL; inform the council of GEPHL activities for the Pacific Island Regional Vector Laboratory (PIRVL); discuss the Island-Wide Vector Management Program (Pacific Island Vector Management Improvement: A Strategy and its Implementation) and creation of the Pacific Island Vector Management Council (PIVMC); and discuss future activities. Presentations were conducted by Dr. Grayson Brown of Pacific Island Health Officers Association (PIHOA) and C. Baradi of DEH. The meeting was attended by representatives from the Department of Agriculture; DPHSS Bureau of Communicable Disease Control; Guam Army National Guard, Department of Military Affairs; Guam Homeland Security/Office of Civil Defense; Guam Veterans Affairs Office; Guam Visitor’s Bureau; PIHOA; Port Authority of Guam; Office of Senator Dennis Rodriguez, Jr.; U.S. Coast Guard Sector Guam; U.S. Naval Hospital; and the University of Guam.

Dr. Grayson Brown, PIHOA’s new regional medical entomologist, was able to expand the collaboration that former PIHOA entomologist Ms. Elodie Vajda, began with Dr. Chris Barker of the University of California, Davis and his work with the California mosquito database platform called CalSurv (California Vectorborne Disease Surveillance Gateway System). Dr. Brown was able to expand Guam and the region’s capacity to utilize the CalSurv system. This system will be used to comprehensively record, map, and manage Guam’s robust baseline (historical) mosquito data. This data will be used for the planning and deployment of time and cost-effective vector surveillance and control activities on Guam. Dr. Barker visited Guam on September 24, 2018 and provided additional guidance to MSCP staff on the use of CalSurv.

ACCOMPLISHMENTS

Walter Reed Biosystematics Unit (WRBU) was able to fund a two-year project for the development of (current) mosquito species list for Guam, mosquito morphological key for the U.S. Affiliated Pacific Islands (USAPIs), and the creation of a DNA barcoding library of Guam mosquitoes at no cost to the Department. DEH anticipates the acquisition of these deliverables and other assistance from WRBU in FY 2019. WRBU's mission is to conduct systematic research on medically important arthropods, such as mosquitoes, and to maintain a collection of them; it acts as a national resource for vector information.

Through PIHOA's contract with Global Scientific Solutions for Health (GSSHealth), DEH continued to receive essential administrative assistance from the private consultant to build up GEPHL's capacity. GSSHealth representatives visited GEPHL in June 2018 to collect data and conduct research for the second installment of deliverables. Among the deliverables conducted and submitted were the Zoom Based ECHO training, which is an avenue by which DEH may conduct remote trainings or meetings through this platform; reinvigorating the MAC by providing the online survey tool, SurveyMonkey; a PowerPoint presentation and meeting minutes for the Mosquito Advisory Council; providing assistance for the preparation and validation of the RAMP 200 assay, including the development of associated standard operating procedures (SOPs); and other SOPs for the MSCP (microscope maintenance, emergency response procedure for arthropod release, handling and storage of dry ice, general fire/life safety, hazard communications plan, and the mosquito-borne disease risk communication plan).

Other notable activities that occurred this fiscal year for MSCP were:

- Two staff attended the New South Wales Pathology Mosquito Surveillance and Control Professional Development and Training in Sydney, Australia, 10/02/17 - 10/13/2017.
- Two staff attended the Florida Mosquito Control Association 2018 Dodd Plenary Short Course Training on adult and larval mosquito identification in Altamonte Springs, 01/21/18 – 01/25/18.
- One staff attended the 2018 WHO Meeting on Climate Change in Nadi, Fiji; 03/13/18 – 03/16/18.
- One staff attended the CDC ELC Annual Grantees Meeting in Atlanta, GA, 04/09/18 – 04/13/18.
- One staff attended the 2018 National Association of Vector-Borne Disease Control Officials (NAVCO) Meeting in Fort Collins, CO, 05/08/18 – 05/11/18.
- Two staff attended the ASTHO Climate and Health Summit in Honolulu, HI, 05/29/18 -05/31/18.
- Four DEH personnel (two MSCP staff) attended the PIHOA sponsored Training of Trainers Course on Shipping of Dangerous Goods (International Air Transportation Association) at the Royal Orchid Guam Hotel in Tumon, 08/06/18 – 08/07/18.
- Employment of one new staff (Matthew Orot, Environmental Technician I) whose primary scope of work is to support the MSCP in field and laboratory duties. M. Orot is 100% funded by the Epidemiology and Laboratory Capacity (ELC) for Infectious Diseases Cooperative Agreement grant.
- Internship of Zachary Quioque, a University of Guam Intern (July 26, 2018 – October 11, 2018), whose primary scope of work is to support the MSCP in field and laboratory duties.

ACCOMPLISHMENTS

- **Mosquito & Vector Surveillance**

MSCP continued to conduct routine mosquito surveillance activities, as outlined in Tier 1 of the Guam Vector Management Strategic Plan 2017- 2020, by primarily utilizing the BG-2 Sentinel Trap and oviposition mosquito traps. Tier 1 sites are Guam’s ports of entry and high-risk transmission areas (e.g., schools; health facilities; and disadvantaged, densely populated, neighborhoods). MSCP was able to increase the capacity of its surveillance activities through the assistance of PIHOA’s regional entomologist. These activities included the preparation and troubleshooting of mosquito traps for routine and mosquito-borne disease response trapping; rearing of mosquito larvae samples to adult; adult mosquito sorting and identification; and the establishment of a mosquito repository for reference specimens.

MSCP implemented surveillance at all Tier 1 sites, except the A.B. Won Pat International Airport due to numerous challenges in obtaining access to the property. Instead, traps will be placed at sites adjacent to the airport beginning FY 2019. Sites where regular surveillance activities were conducted in FY 2018:

- Port Authority of Guam, Piti
- Guam Memorial Hospital, Tamuning
- Guam Regional Medical City, Dededo
- Astumbo Elementary School, Dededo

As a result of receiving additional surveillance equipment and supplies in FY 2018, MSCP will be expanding surveillance to Tier 2 and Tier 3 sites in FY 2019. During FY 2018, the MSCP collected the following mosquitoes: 2,848 female species, 1,714 male species, and 95 samples that were unidentifiable because of missing or damaged body parts. Thus, a total of 4,657 species were collected in the fiscal year, which was a 326% increase from FY 2017. Collection and identification of all mosquitos for FY 2017 and FY 2018 are presented in **Table 24**.

Ae. aegypti, which was eradicated on Guam post-WWII, was not observed in any of the surveillance samples. *Ae. aegypti* is an efficient transmitter of the virus that causes dengue fever; this vector can also spread other mosquito-borne diseases. Amongst all mosquito species, *Ae. aegypti* is the primary vector of concern to DEH.

Mosquito Species	Fiscal Year 2017				Fiscal Year 2018			
	Female	Male	Unknown Sex	Total Species	Female	Male	Unknown Sex	Total Species
<i>Aedes albopictus</i>	496	510	2	1,008	2,457	1,442	41	3,940
<i>Aedes aegypti</i>	0	0	0	0	0	0	0	0
<i>Aedes guamensis</i>	3	1	0	4	0	0	0	0
<i>Aedes oakleyi</i>	0	0	0	0	1	1	0	2
<i>Aedes sp.</i>	2	1	0	3	0	0	0	0
<i>Aedes unknown</i>	0	0	0	0	5	1	0	6
<i>Culex quinquefasciatus</i>	30	17	0	47	381	263	1	645
<i>Culex sp.</i>	13	15	1	29	4	6	0	10
<i>Lutzia fuscana</i>	0	2	0	2	0	0	0	0
<i>Unknown</i>	0	0	0	0	0	1	53	54
TOTAL	544	546	3	1,093	2,848	1,714	95	4,657

Table 24. Mosquito Surveillance Data (Species Identification) conducted by DEH in FY 2017 & 2018.

ACCOMPLISHMENTS

- **Mosquito Surveillance and Control Regional Support**

In their continued support of the MSCP, PIHOA funded a new regional medical entomologist, Dr. Grayson Brown, on March 12, 2018. Dr. Brown, a well-known and respected entomologist in the vector management community, brought with him years of experience to the region. Embedded at GEPHL, Dr. Brown's primary purpose was to collectively and individually develop mosquito surveillance and control programs of the U.S. Affiliated Pacific Islands and to establish the Pacific Island Regional Vector Laboratory (PIRVeL). The many functions of PIRVeL include the sorting and identification of mosquito species, testing mosquito pools for dengue (using RAMP 200 antigen assay), and rearing and maintaining mosquito colonies for the testing of Guam mosquitoes for insecticide resistance. PIRVeL was managed by Dr. Brown with the supplemental assistance of DEH. Through these efforts, GEPHL and MSCP will be providing laboratory support for the region. Additionally, he greatly assisted in further building Guam's MSCP's surveillance and laboratory activities. Through a collaborative effort lead by PIHOA, the first Pacific Island Vector Management Strategic Plan was developed and adopted by the USAPIs, which led to the establishment of the Pacific Island Vector Management Council. Two DEH staff represents Guam on the Council.

- **Guam Environmental Public Health Laboratory - Mosquito Lab**

GEPHL was built to enhance the capacity of the MSCP to prevent the introduction and spread of mosquito-borne diseases on Guam. GEPHL's goals include developing DEH's capacity to collect and analyze data for determining relative abundance of mosquito species, monitoring geographic and environmental distribution patterns of mosquito species, identifying maximum and minimum risk periods of public exposure to mosquito-borne diseases, and evaluating mosquito control activities. The data collected will become part of a historical database, which provides information on the dynamics of mosquitoes and mosquito-borne diseases in Guam.

Despite ongoing structural and operational challenges with the GEPHL, (construction and equipment deficiencies caused by building contractor) DEH occupied the facility last fiscal year on June 9, 2017, with the written agreement that these deficiencies would be timely corrected by the contractor. To date, these deficiencies have yet to be resolved. The occupation of the facility enabled DEH to begin routine surveillance of mosquitoes. Additionally, the occupation of the facility was necessary to accommodate the installation and storage of procured equipment and to provide office space for new and temporary staff and consultants. DEH continued to monitor the facility's temperature and relative humidity during the fiscal year to assess the operation of its HVAC system to determine if it will meet the specifications of a Bio Safety Laboratory certified at level 2 and 3. At this certification level, the Guam EPHL must be able to maintain a consistent temperature of



Photo 3: Dr. Grayson Brown tending to a mosquito colony at GEPHL. (Source: DEH, 04/27/18)

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72-76 degrees Fahrenheit and a relative humidity of 45% - 55%. Which it has been unable to consistently meet due to the ongoing issues.

Many MSCP activities that began in FY 2017 continued in FY 2018. These activities included the preparation and troubleshooting of mosquito traps for routine and mosquito-borne disease response trapping; rearing of mosquito larvae samples to adult; adult mosquito sorting, identification, and building a mosquito repository for reference specimens. Throughout the year, the Vector-borne Disease Laboratory (VBDL) worked in concurrence with PIRVeL. Both labs essentially occupy the same laboratory space. VBDL serves to provide data and build vector management for Guam, while PIRVeL works to strengthen vector management in the region. These activities include rearing of mosquito colonies to determine insecticide resistance on Guam and the identification of mosquitoes received from regional partners.

- **Mosquito-Borne Disease and Outbreak Response**

Five mosquito-borne diseases (MBD) cases, which were all imported, were reported on:

1. December 13, 2017: One imported case of confirmed dengue fever from the Philippines and/or Singapore.
 - Guam resident residing in Yigo
 - Patient was seen and treated on Guam
 - Trioplex rRT-PCR: Dengue RNA detected; no Zika or chikungunya RNA detected
 - DEH performed surveillance within 200 meters from the patient's residence
 - No known locally transmitted cases of MBD resulted from this patient
 - Approximately 45 brochures were distributed to residents living near the case-patient
2. March 23, 2018: One case of suspected dengue fever. No recent travel can be associated with this case.
 - Guam resident residing in Dededo
 - Patient was seen and treated on Guam
 - Serology testing: Dengue fever Ab, IgG: ≥ 1.91 , Abnormal; Dengue fever Ab, IgM: ≥ 5.67 , Abnormal High
 - Surveillance not conducted; morbidity report was not timely transmitted to DEH for effective surveillance
 - No known locally transmitted cases of MBD resulted from this patient
 - No brochures were distributed to residents living near the case-patient
3. August 10, 2018: One imported case of confirmed Dengue Fever from the Philippines.
 - Guam resident residing in Dededo
 - Patient was seen and treated on Guam
 - Serology testing: Dengue fever Ab, IgG: ≥ 1.77 , Abnormal; Dengue fever Ab, IgM: ≥ 1.91 , Abnormal High
 - Surveillance not conducted; morbidity report was not timely transmitted to DEH for effective surveillance

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- No known locally transmitted cases of MBD resulted from this patient
 - No brochures were distributed to residents living near the case-patient
4. August 10, 2018: One imported case of confirmed Dengue Fever from the Philippines.
- Guam resident residing in Dededo
 - Patient was seen and treated on Guam
 - Serology testing: Dengue fever Ab, IgG: ≥ 1.88 , Abnormal; Dengue fever Ab, IgM: ≥ 1.30 , Abnormal High
 - Surveillance not conducted; morbidity report was not timely transmitted to DEH for effective surveillance
 - No known locally transmitted cases of MBD resulted from this patient
 - No brochures were distributed to residents living near the case-patient
5. September 19, 2018: One imported case of confirmed Dengue Fever from the Philippines.
- Guam resident residing in Dededo
 - Patient was seen and treated on Guam
 - Serology testing: Dengue fever Ab, IgG: ≥ 0.93 , Abnormal; Dengue fever Ab, IgM: ≥ 22.80 , Abnormal High
 - Surveillance not conducted; morbidity report was not timely transmitted to DEH for effective surveillance
 - No known locally transmitted cases of MBD resulted from this patient
 - No brochures were distributed to residents living near the case-patient
- **Epidemiology and Laboratory Capacity for Infectious Disease (ELC) Cooperative Agreement**

Through the Epidemiology and Laboratory Capacity (ELC) for Infectious Diseases Cooperative Agreement, DEH received \$136,521 in FY 2018 for MSCP for Year 5, Project M1 installment. ELC grants are awarded to states and territories to strengthen the United States' public health infrastructure to:

- Build and maintain effective public health workforce for rapid response to infectious disease outbreaks
- Strengthen cross-cutting national surveillance systems
- Boost laboratory infrastructure with the latest diagnostic technologies
- Improve health information systems to efficiently transmit, receive, and analyze infectious disease-related data electronically

The 5-year funding cycle for ELC's Cooperative Agreement began August 1, 2014 and will run through July 31, 2019. This funding was approved for the recruitment of a Medical Entomologist, and the continuation of funding for the Environmental Technician I. Funding was also received this fiscal year for two DEH staff to attend the ELC Grantees Meeting in Atlanta, Georgia in FY 2019. Although approximately \$500,000 was requested for MSCP laboratory, which included a Polymerase Chain Reaction machine and vector control equipment, the requests were not approved. The funding for the procurement of these items will be requested once again in the next ELC grant cycle.

ACCOMPLISHMENTS

- **Rodent Surveillance and Control Program**

Rodent surveillance and control activities remained inactive during the fiscal year. No routine surveillance activities were conducted aside from normal inspections of private premises due to public complaints received by the Division. A total of 14 rodent-related complaints were received in FY 2018. Three cases could not be substantiated; 14 cases were closed (seven carry-overs from FY 2017, and seven from this fiscal year) and 11 complaints (one carry-over from FY 2017, and seven from this fiscal year) were still pending and carried over to FY 2019.

- **Fly Control Program**

A total of eight fly complaints were received by DEH in FY 2018. Three cases could not be substantiated; six cases were closed (one carry-over from FY 2017, and five from this fiscal year), and four complaints (one carry-over from FY 2017, and three from this fiscal year) were still pending and carried over to Fiscal Year 2019.

- **Public Nuisance Complaints**

A total of 149 public nuisance complaints were received in FY 2018, with the 3rd quarter having the most complaints (55). In addition, nine from FY 2015, 17 from FY 2016, and 49 from FY 2017 were carried into FY 2018. One hundred eleven (111) cases were closed in FY 2018, and 114 complaints remain pending and will be addressed in FY 2019.

DPHSS re-instituted a policy of referring all public nuisance complaints, not related to mosquito, to the respective village mayors to address and resolve. A press release (2018-030) was issued for public notification of the policy.

DIVISION OF ENVIRONMENTAL HEALTH ACTIVITIES

The Division of Environmental Health took advantage of several training opportunities during FY 2018, as well as providing various educational presentations to the public. One proposed rules and regulations was developed and adopted during the fiscal year, while several drafts were being developed, reviewed, and/or revised.

- **Off-Island Training/Conferences**

- 10/02 - 13/17: New South Wales Pathology Mosquito Surveillance and Control Professional Development and Training in Sydney, Australia. Attended by M. Lastimoza and C. Baradi.
- 01/21 - 25/18: 2018 Dodd Short Courses in Altamonte Springs, Florida. Attended by D. Mitchell and T. Shimizu.
- 03/13 - 16/18: 2018 WHO Meeting on Climate Change in Nadi, Fiji. Attended by R. Rabago.
- 03/26 - 27/18: 2018 Bureau of Justice Assistance Basics in Financial Management Training for Federal Grants in Washington DC. Attended by J. Pinaula and R. Suva.
- 04/09 - 13/18: CDC Grantees Meeting in Atlanta, Georgia. Attended by R. Rabago
- 04/26 - 27/18: 2018 West Regional Prescription Drug Monitoring Program Meeting in Albuquerque, New Mexico. Attended by J. Pinaula and R. Suva.

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- 05/08 - 11/18: 2018 National Association of Vector-Borne Disease Control Officials (NAVCO) Meeting in Fort Collins, Colorado. Attended by M. Lastimoza.
 - 05/29 - 31/18: ASTHO Climate and Health Summit in Honolulu, Hawaii. Attended by C. Baradi and T. Shimizu.
 - 06/22 - 29/18: 2018 NEHA Annual Education and Conference in Anaheim, California. Attended by T. Nadeau, R. Rabago, V. Raymundo, and T. Shimizu.
 - 06/23 - 24/18: Certified Professional in Food Safety (CPFS) Review Course in Anaheim, California. Attended by V. Raymundo.
 - 06/25 - 27/18: 2018 State Environmental Health Directors (SEHD) Annual Meeting in Anaheim, California. Attended by M. Lastimoza.
- **In-House and On-Island Training, and On-Island Presentations**
 - 10/30/17 - 11/03/17: Guam EPA “CORE” training at Palmridge Inn in Barrigada. Attended by V. Raymundo, T. Shimizu, and C. Takase
 - 11/27/17 - 11/30/17: Category-7 Training at GEPHL given by M. Lastimoza. Attended by V. Raymundo, T. Shimizu, C. Takase
 - 11/2017: Tulane University, Vector Control Environmental Health Program online course (VCEHP) 103: Performance Assessment and Improvement of Vector Control Services. Attended by C. Takase.
 - 11/2017: Tulane University, VCEHP 104: Tick Biology and Control. Attended by C. Takase.
 - 11/2017: Tulane University, VCEHP 105: Mosquito Biology and Control. Attended by C. Takase.
 - 11/2017: Tulane University, VCEHP 106: Toxicology of Pesticides for Environmental Health Professionals. Attended by C. Takase.
 - 12/07/17: DOA Procurement Plan Training facilitated by Guam GSA. Attended by T. Nadeau, R. Rabago, M. Scroggs, R. Suva, and J. Pinaula.
 - 12/2017: South Central Center for Public Health Preparedness online course: “08. Zoonoses, Vectors, Pests, and Weeds. Attended by J. Cruz.
 - 12/2017: Tulane University, VCEHP 107: Rodent Management.” Attended by C. Takase.
 - 12/2017: Tulane University, VCEHP 108: Public Health Insect Pests in Food & Housing Environments. Attended by C. Takase.
 - 12/2017: Tulane University, VCEHP 109: Pest Management Considerations for Schools. Attended by C. Takase.
 - 12/2017: Tulane University, VCEHP 110: Risk Communication Basics for Environmental Health Professionals. Attended by C. Takase.
 - 12/20/17: Guam EPA Category-7 Exam at Guam EPA in Tiyan. Attended by T. Shimizu and C. Takase.
 - 01/2018: South Central Center for Public Health Preparedness online course: “05. Wastewater.” Attended by J. Cruz.
 - 01/2018: South Central Center for Public Health Preparedness online course: “11. Air Quality and Environmental Noise.” Attended by J. Cruz.
 - 01/2018: South Central Center for Public Health Preparedness online course: “13. Institutions and Licensed Establishments.” Attended by J. Cruz.
 - 01/2018: South Central Center for Public Health Preparedness online course: “15. Disaster Sanitation.” Attended by J. Cruz.

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- 01/06/18: Office of Homeland Security “Active Shooter Preparedness Workshop” in Mangilao. Attended by C. Takase.
- 01/09/18: US FDA ORA University online course: “FDA 38 Basics of Inspections: Beginning an Inspection.” Attended by T. Shimizu.
- 01/09/18: US FDA ORA University online course: “FDA 35 Basic Food Law for State Regulators.” Attended by T. Shimizu.
- 01/16/18: Department of Homeland Security “Active Shooter Preparedness Workshop” at the University of Guam in Mangilao. Attended by T. Shimizu and C. Takase.
- 01/25/18: Mosquito Morphology presentation conducted by Claire Baradi. Attended by M. Scroggs, K. Duenas, K. Del Mundo, E. Lum, L. Navarro, V. Raymundo, and R. Oriondo.
- 02/02/18: Health Insurance Portability and Accountability Act (HIPAA) conducted by Dr. Suzanne S. Kaneshiro, DDS, MBA at the State Office conference room, DPHSS in Mangilao. Attended by K. Duenas.
- 02/08/18: Health Insurance Portability and Accountability Act (HIPAA) conducted by Dr. Suzanne S. Kaneshiro, DDS, MBA at the State Office conference room, DPHSS in Mangilao. Attended by M. Scroggs, J. Pinaula, D. Mitchell, T. Shimizu, C. Takase, R. Oriondo, V. Raymundo, E. Lum, L. Navarro, and J. Cruz.
- 02/09/18: Health Insurance Portability and Accountability Act (HIPAA) conducted by Dr. Suzanne S. Kaneshiro, DDS, MBA at the Division of Senior Citizens conference room, Castle Mall in Mangilao. Attended by T. Nadeau, R. Rabago, C. Baradi, M. Lastimoza, and J. Garcia.
- 02/09 - 28/18: Procurement Module 1: Procurement Basic Training, conducted by GCC at the Guam Community College. Attended by J. Pinaula and R. Suva.
- 02/26/18 - 03/02/18: US FDA “FD112: Food Code” and “FD218: Risk-Based Inspections at Retail” training at Pacific Star Hotel. Attended by M. Scroggs, K. Duenas, K. Del Mundo, E. Lum, L. Navarro, V. Raymundo, R. Oriondo, C. Baradi, J. Cruz, J. Garcia, D. Mitchell, T. Shimizu, and C. Takase.
- 03/09/18: DOA Human Resources Division, Customer Service training in Tamuning. Attended by C. Baradi, J. Cruz, J. Garcia, T. Shimizu, and C. Takase.
- 03/16/18: “Career Day” Presentation at Astumbo Middle School in Dededo. Presentation conducted by D. Mitchell, T. Shimizu, and C. Takase.
- 03/20/18: Cross-connection presentation conducted by E. Lum and D. Michell at the Mangilao Public Health DEH Conference Room; attended by M. Scroggs, K. Duenas, K. Del Mundo, E. Lum, L. Navarro, V. Raymundo, and R. Oriondo.
- 04/2018: South Central Center for Public Health Preparedness online course: “04. Potable Water.” Attended by J. Cruz.
- 04/2018: South Central Center for Public Health Preparedness online course: “14. Swimming Pools and Recreational Facilities.” Attended by J. Cruz.
- 04/12/18: NEHA, Vector Control Environmental Health Program online course: “VCEHP 109: Pest Management Considerations for Schools.” Attended by T. Shimizu.
- 04/12/18: NEHA, Vector Control Environmental Health Program online course: “VCEHP 110: Risk Communication Basics for Environmental Health Professionals.” Attended by T. Shimizu.
- 04/12/18: NEHA, Vector Control Environmental Health Program online course: “VCEHP 111: Bed Bugs – Identification, Biology, and Control.” Attended by C. Baradi and T. Shimizu.

ACCOMPLISHMENTS

- 04/17/18: Radiological Health presentation conducted by M. Lastimoza; attended by M. Scroggs, K. Duenas, K. Del Mundo, E. Lum, L. Navarro, V. Raymundo, and R. Oriondo.
- 04/18/18: FBI Chemical Industry Outreach “Improvised Explosives - Explosive Chemical Precursors (ECPs) and Toxic Industrial Chemicals (TICs)” at University of Guam and Hawaiian Rock Company Quarry in Mangilao Guam. Attended by J. Cruz, J. Garcia, and M. Lastimoza.
- 04/19/18: FBI Chemical Industry Outreach “Improvised Explosives - Explosive Chemical Precursors (ECPs) and Toxic Industrial Chemicals (TICs)” at University of Guam and Hawaiian Rock Company Quarry in Mangilao. Attended by D. Mitchell, and T. Shimizu.
- 04/19/18: NEHA, Vector Control Environmental Health Program online course: “VCEHP 108: Public Health Insect Pests in Food & Housing Environment.” Attended by T. Shimizu.
- 04/27/18: South Central Center for Public Health Preparedness online course: “10. Occupational Safety and Health.” Attended by J. Garcia.
- 05/2018: South Central Center for Public Health Preparedness online course: “06. Solid and Hazardous Waste.” Attended by J. Cruz.
- 05/24/18: Pest Threshold presentation conducted by K. Del Mundo; attended by M. Scroggs, K. Duenas, E. Lum, L. Navarro, V. Raymundo, and R. Oriondo.
- 05/30/18: South Central Center for Public Health Preparedness online course: “07. Hazardous Materials.” Attended by J. Garcia.
- 06/06 - 25/18: Procurement Module 3: Procurement Review and Remedies, conducted by GCC. Attended by R. Suva and J. Pinaula.
- 07/2018: South Central Center for Public Health Preparedness online course: “09. Radiation Protection.” Attended by J. Cruz.
- 07/2018: South Central Center for Public Health Preparedness online course: “10. Occupational Safety and Health.” Attended by J. Cruz.
- 07/2018: South Central Center for Public Health Preparedness online course: “12. Housing Sanitation and Safety.” Attended by J. Cruz.
- 08/03/18: South Central Center for Public Health Preparedness online course: “02. Statutes and Regulations. Attended by J. Garcia.
- 08/06 - 07/18: PIHOA, Training of Trainers Course on Shipping of Dangerous Goods in Royal Orchid Guam Hotel in Tumon. Attended by C. Baradi, K. Del Mundo, K. Duenas, and C. Takase.
- 08/07/18: South Central Center for Public Health Preparedness online course: “09. Radiation Protection.” Attended by J. Garcia.
- 08/16/18: DEH in-house training, “Utilization of PDF Fillable Guam Food Code Inspection Forms using the Adobe Acrobat Application” at GEPHL, Dededo. Attended by C. Baradi, J. Cruz, K. Del Mundo, J. Garcia, E. Lum, D. Mitchell, R. Oriondo, R. Rabago, V. Raymundo, T. Shimizu, M. Scroggs, C. Takase
- 08/28/18: Partnership for Food Protection 10th Anniversary Webinar. Attended by R. Rabago, C. Baradi, M. Lastimoza, and J. Garcia.
- 09/17 - 21/18: National Swimming Pool Foundation, Certified Pool/Spa Operator and Inspector Certification Course conducted by William Sexton at Guam Hilton Resort and Spa in Tumon. Attended by T. Nadeau, R. Rabago, C. Baradi, D. Mitchell, J. Garcia, J. Cruz, T. Shimizu, C. Takase, M. Orot, M. Scroggs, K. Del Mundo, K. Duenas, E. Lum, V. Raymundo, L. Navarro, and R. Oriondo.

ACCOMPLISHMENTS

- **Rules and Regulations**

- **Controlled Substances**

The proposed “Rules Governing the Manufacture, Distribution, and Dispensing of Controlled Substances” was officially adopted and made effective on January 21, 2018, pursuant to the Administrative Adjudication Act. No action was taken by the Legislature, and thus, the rules lapsed into adoption after 90 days. The rules updated the fee schedule for the issuance of the Guam Controlled Substances Registrations (GCSR). Fees collected from the issuance of GCSR are deposited into the Controlled Substances Diversion Fund (a mandate of the Guam Controlled Substances Act) to combat the diversion of pharmaceutical controlled substances, which includes the establishment of the prescription drug monitoring program. The increase in the fees was made necessary to adequately fund the Controlled Substances Program (CSP) and the Guam Prescription Drug Monitoring Program (PDMP); both programs are operated by the Division of Environmental Health.

- **Wastewater and Toilet**

The “Rules and Regulations Governing Chemical Toilets” (the “Chemical Toilet Regulations”) became effective on September 17, 2017. DEH formulated and finalized the required Chemical Toilet Permit Application (“Application”), the Chemical Toilet Permit, and the Chemical Toilet Inspection Report for the enforcement of the regulations. Letters informing operators of the regulations’ adoption, along with a copy of the said regulations, were issued to the three island businesses on March 27, 2018. All three applicants passed their pre-operational inspections by the conclusion of FY 2018.

- **Cosmetology**

In FY 2018, the draft proposed “Rules and Regulations Pertaining to Barber and Beauty Shops, Cosmetology Schools, and Nail Salons” were completed. The public health reasoning was also completed; however, the economic impact statement survey was still pending final supervisory approval. It is anticipated that the proposed regulations will undergo stakeholder review and public hearing in FY 2019.

- **Tattoo**

DEH staff completed the revisions to the existing “Rules and Regulations Pertaining to Tattoo Shops” in FY 2018. The public health reasoning and economic impact statement survey are planned for completion in FY 2019; it is anticipated that a stakeholder review and public hearing will also occur in FY 2019.

- **Radiological Health**

The draft proposed “Regulations for the Licensing and Registration of Radioactive Materials and Other Sources of Ionizing Radiation” were completed on September 14, 2018 and are pending supervisory review and approval. DEH expects the approval of the final draft in FY 2019.

ACCOMPLISHMENTS

- School Building Sanitation

Comments from the Office of the Attorney General (OAG) on the proposed “Rules and Regulations Pertaining to School Sanitation” were received by DEH via email on November 17, 2017. In addition to the minor changes requested by the OAG, DEH was advised that the Economic Impact Statement (EIS) must include the financial impact of the current, existing regulations. As a result, DEH conducted another survey on January 2018 that was specific to the existing regulations. Utilizing the survey responses, DEH finalized the EIS, and revised the proposed regulations; both documents were packaged for re-submission to the OAG by the end of FY 2018.

- Public Swimming Pool

DEH began the development of the proposed “Rules and Regulations for Public Swimming Pools” in the first quarter of FY 2018. The proposed regulations incorporated standards recommended in the second edition of the U.S. Centers for Disease Control and Prevention’s Model Aquatic Health Code. The first draft of the proposed regulations was completed in March 2018. To assess the economic impact of both proposed and existing regulations, DEH sent out survey questionnaires to all 107 permitted public swimming pools on Guam in April 2018. The EIS was finalized in June 2018, and the proposed regulations were presented to members of the Guam Hotel and Restaurant Association on September 27, 2018 at the Hyatt Regency Hotel to solicit stakeholder comments. An administrative public hearing for the proposed regulations was scheduled for October 18, 2018 (FY 2019).

- **Policies and Procedures**

Sixteen (16) directives and five (5) standard operating procedures were issued to improve the operations of the Division during Fiscal Year 2018. These directives and standard operating procedures included:

- Policies related to office operations

- Format for Report Writing
- Comprehensive Travel Reports
- Onsite Training Course Maximum Class Limit for Food Safety Health Certificate Training Course
- Multiple Temporary Assignments as Acting EPHO Supervisor

- Standard Operating Procedures

- Operation of the Autoclave Machine
- Food Safety Health Certificate Training Course
- Receiving Procured Items
- DEH Social Media Activities
- Operation of the Guam EPHL Surveillance Camera System

TRENDS

BUDGET APPROPRIATION

As shown in **Figure 12** trend data, General Fund (GF) appropriation to DEH increased from FY 2015 - 2017; however, it decreased by 11.7% for FY 2018. Appropriations from the Environmental Health Fund (EHF) has also been increasing in the past years (**Figure 13**). In FY 2015, Environmental Health Fund expenditure dropped, partly due to the late recruitment of vacant positions, but otherwise, it has been steadily increasing. Lapses at the end of every fiscal year are due primarily to the Division's inability to recruit personnel and/or being denied for recruitment. This is particularly evident for vacancies funded through EHF as expenditures have always been less than the appropriated amount (**Figures 14 and 15**).

Due to changes in the Sanitary Permit fees that were implemented in FY 2011 (**Figure 16**), revenues into EHF have increased since FY 2012. In FY 2014, revenue exceeded \$1 million for the first time. Sanitary Permit fees make up the majority of the revenue that the Division receives.

HEALTH-REGULATED ESTABLISHMENT INSPECTIONS

A greater number of inspections were conducted of food-related establishments and institutional facilities, when compared to other health-regulated establishments, during FY 2004 to FY 2018; this reflected the priorities of the Division (**Figure 17**). The number of inspections of institutional facilities during the period was directly attributed to the Division's commitment to inspecting every child care facility four times a year; inspections of school buildings have decreased in the last four years as DEH had focused only on the six pilot schools participating in the Community-Supported Maintenance Program. Facilities in other categories were inspected less frequently every year. The sudden increase of inspection numbers for food facilities in FY 2013 was a result of the Division's focus in preparing the food industry for the implementation of the newly-adopted Guam Food Code.

Cosmetic establishments were inspected more frequently during FY 2013 and FY 2014 as a result of focusing on these specific establishments during those two years. The focus on cosmetic establishments was renewed in FY 2017 as DEH's 2nd Annual Guam Environmental Public Health Education Month 2018 directed its attention to the practice of cosmetology. This resulted in a significant increase in inspections for cosmetic establishments: from 19 total inspections in FY 2016 to 83 total inspections in FY 2017 and 105 in FY 2018. This was also due to DEH inspectors becoming trained to conduct solo inspections, which allowed them to maintain and surpass inspection numbers from the previous years.

Inspection numbers began to increase again in FY 2016, when new staff completed their training and were able to conduct independent inspections, especially of temporary events, such as the Festival of the Pacific Arts (FestPac), which was held that year with several permitted Temporary Food Service Establishments (TFSE). At FestPac, DEH inspected and monitored every TFSE daily for two weeks. DEH was able to maintain inspection levels through Fiscal Years 2017 and 2018.

**FIGURE 12. GENERAL FUND APPROPRIATIONS AND EXPENDITURES
(FY 2005 - 2018)**

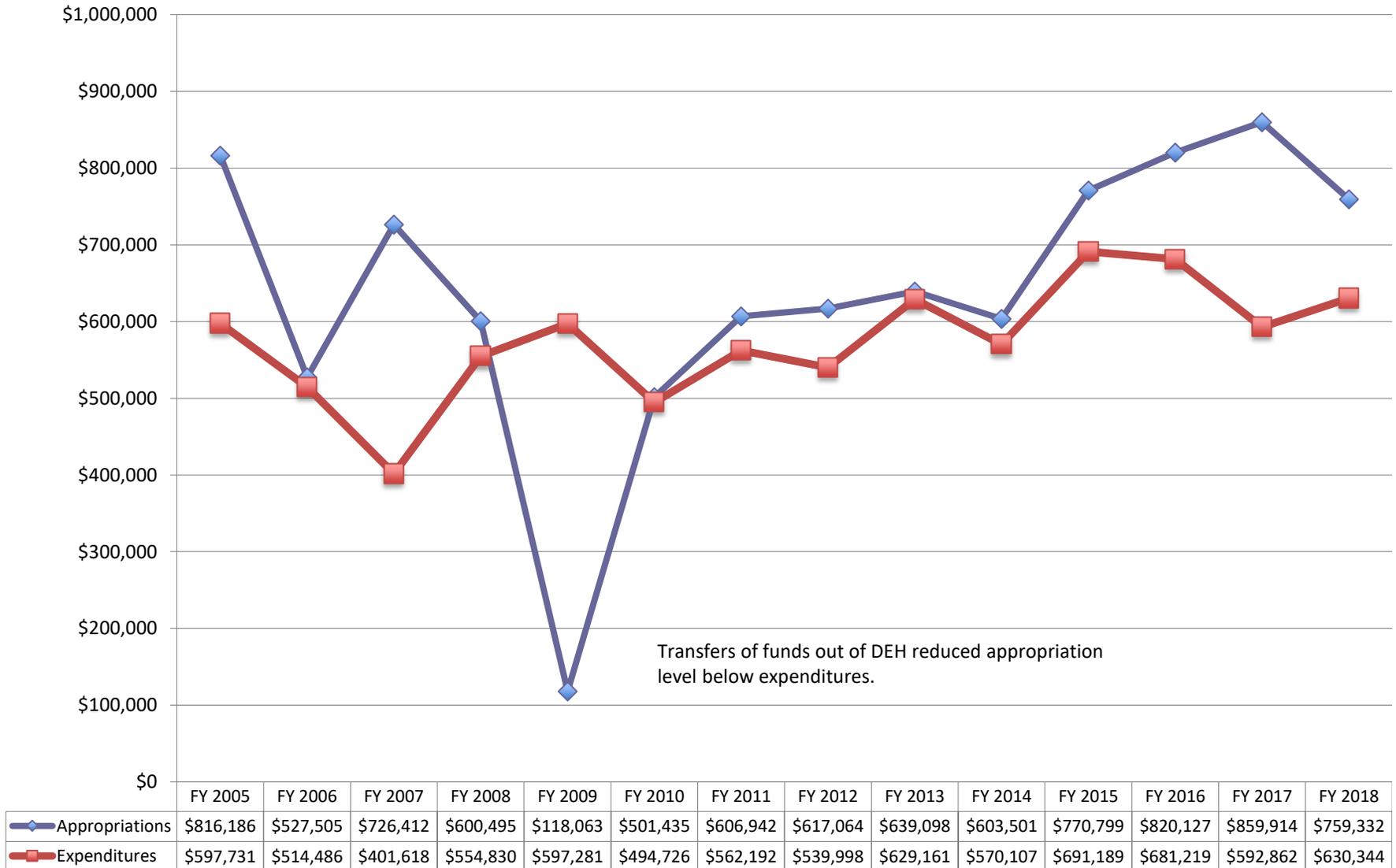


FIGURE 13. ENVIRONMENTAL HEALTH FUND REVENUES, APPROPRIATIONS, AND EXPENDITURES (FY 2005 - 2018)

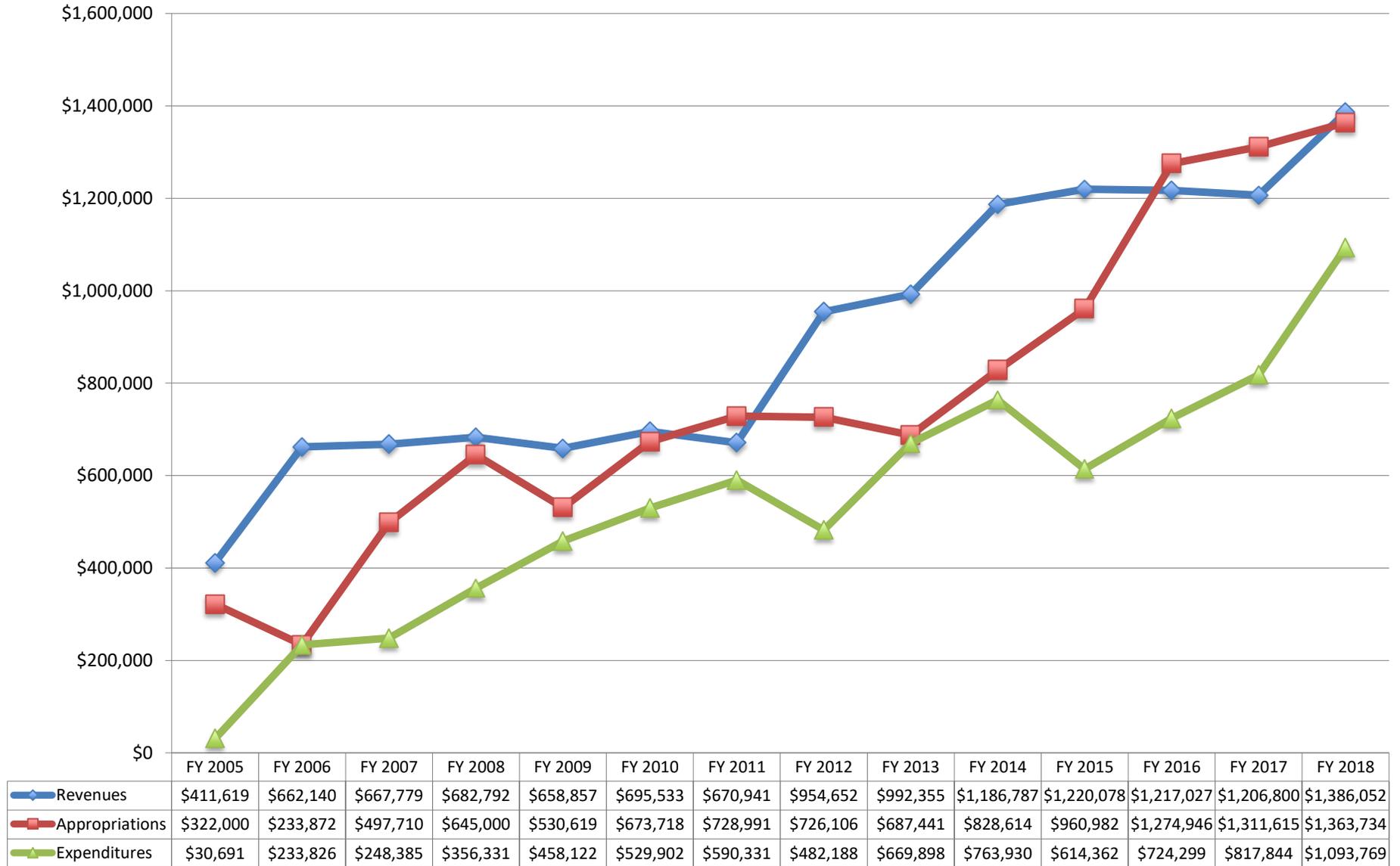
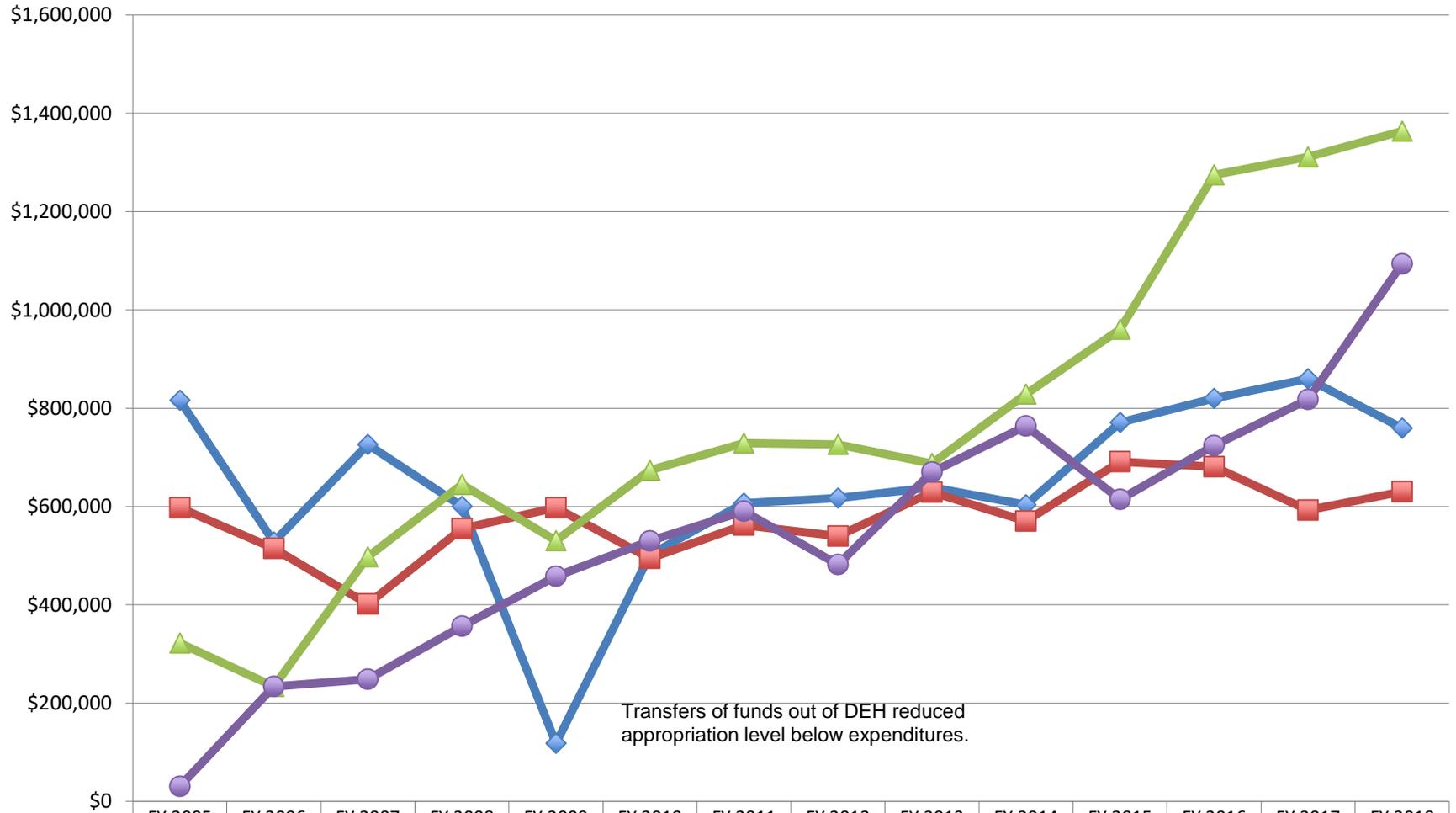
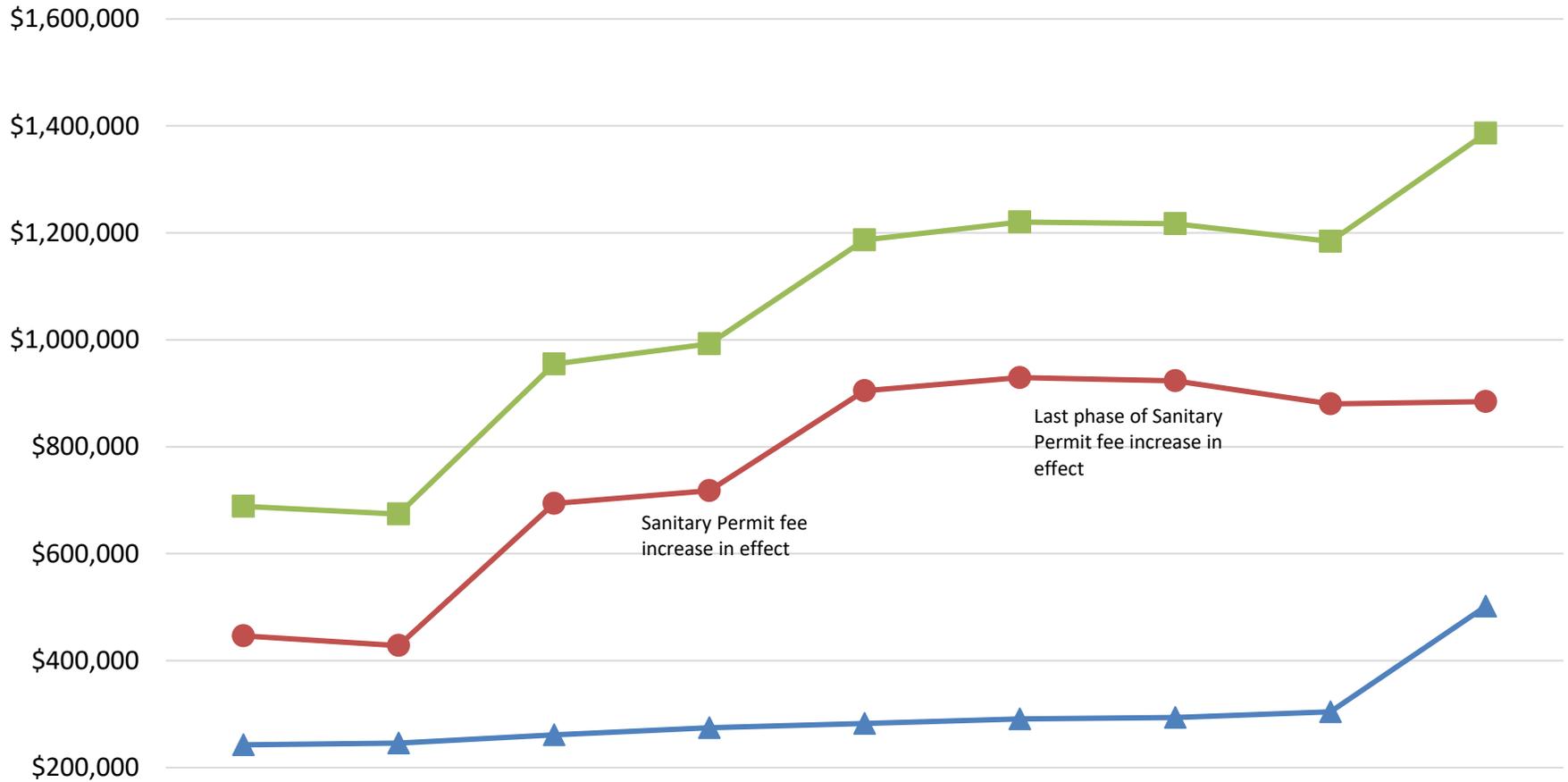


FIGURE 14. APPROPRIATIONS AND EXPENDITURES BY FUNDING SOURCE (FY 2005 - 2018)



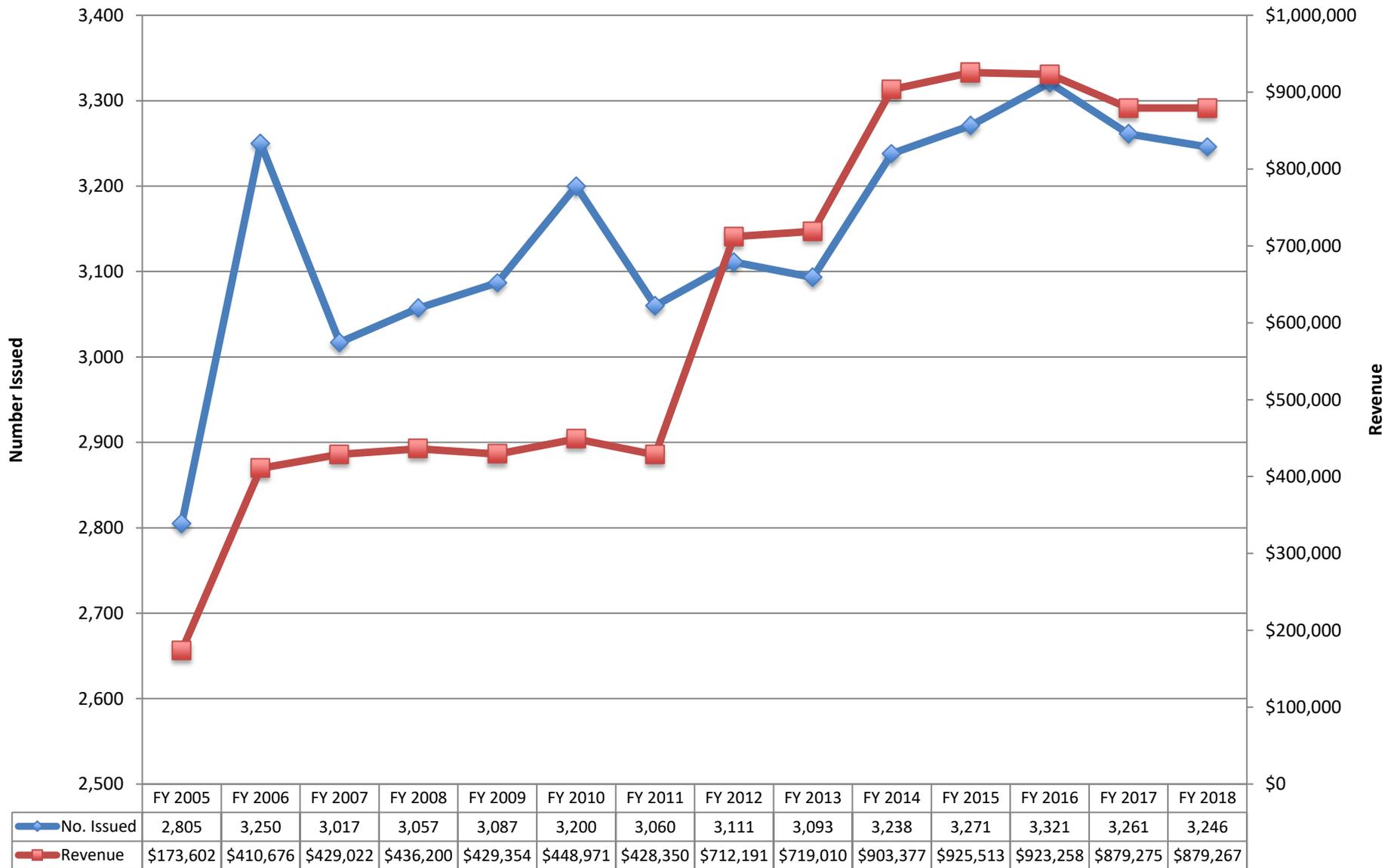
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
GF Appropriations	\$816,186	\$527,505	\$726,412	\$600,495	\$118,063	\$501,435	\$606,942	\$617,064	\$639,098	\$603,501	\$770,799	\$820,127	\$859,914	\$759,332
GF Expenditures	\$597,731	\$514,486	\$401,618	\$554,830	\$597,281	\$494,726	\$562,192	\$539,998	\$629,161	\$570,107	\$691,189	\$681,219	\$592,862	\$630,344
EHF Appropriations	\$322,000	\$233,872	\$497,710	\$645,000	\$530,619	\$673,718	\$728,991	\$726,106	\$687,441	\$828,614	\$960,982	\$1,274,946	\$1,311,615	\$1,363,734
EHF Expenditures	\$30,691	\$233,826	\$248,385	\$356,331	\$458,122	\$529,902	\$590,331	\$482,188	\$669,898	\$763,930	\$614,362	\$724,299	\$817,844	\$1,093,769

**FIGURE 15. ENVIRONMENTAL HEALTH FUND REVENUE BY SOURCE
(FY 2010 - 2018)**

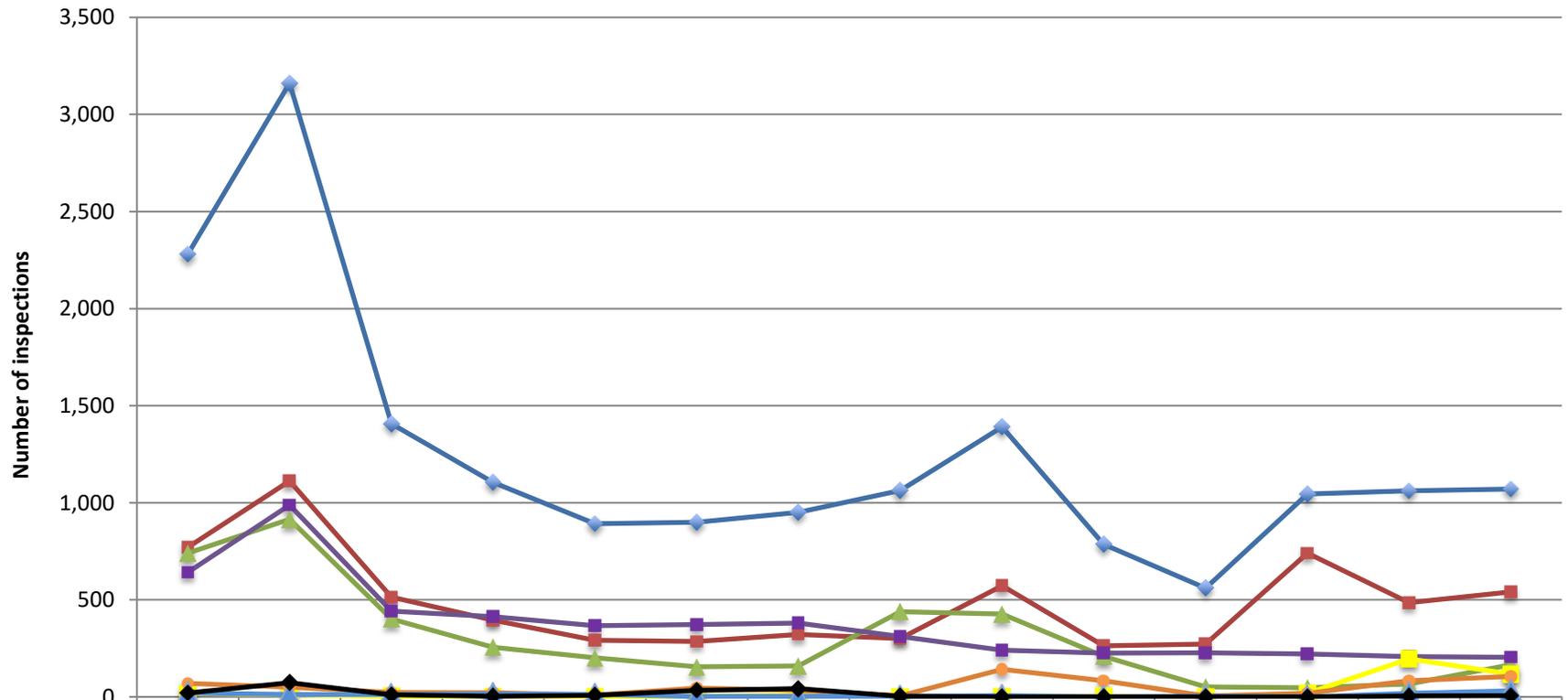


	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
▲ Health Certificate	\$242,447	\$245,889	\$260,955	\$274,370	\$282,127	\$290,724	\$293,632	\$304,042	\$501,473
● Sanitary Permit	\$446,321	\$428,052	\$693,698	\$717,985	\$904,669	\$929,354	\$923,395	\$880,231	\$884,579
■ Total Revenue	\$688,768	\$673,941	\$954,652	\$992,355	\$1,186,796	\$1,220,078	\$1,217,027	\$1,184,273	\$1,386,052

**FIGURE 16. SANITARY PERMITS ISSUED AND REVENUES GENERATED
(FY 2005 - 2018)**



**FIGURE 17. INSPECTIONS BY CATEGORY, ALL TYPES
(FY 2005 - 2018)**



	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Total Inspections	2,280	3,161	1,406	1,105	892	899	951	1,063	1,390	786	560	1,045	1,061	1,070
Retail Food	770	1,112	513	395	291	286	322	301	573	263	272	740	485	541
Food Manufacturers	740	915	401	256	202	155	160	439	427	209	52	47	66	165
Institutional	642	988	442	413	367	372	380	311	240	226	227	221	208	204
Hotel/Motel	18	11	3	2	2	4	10	0	2	4	0	18	196	118
Cosmetic	70	50	23	21	9	46	33	5	142	83	5	19	83	105
Laundry/Dry Cleaning	20	12	13	15	13	2	3	3	6	1	4	0	18	31
Public Swimming Pool	20	73	11	3	8	34	43	4	0	0	0	0	5	6

PROCESSING CENTER

In the past 14 years, DEH issued a yearly average of 3,144 Sanitary Permits (**Figure 18**); 32,549 Health Certificates (**Figure 19**); and 360 Controlled Substances Registrations (**Figure 20**). The revenues generated were directly correlated to the number of permits or certificates issued; more issuances meant more monies deposited into the Environmental Health Fund. This was evident for Sanitary Permits until FY 2007. The inconsistency of the Sanitary Permit trend for FY 2016 was likely due to the increased number of applicants requesting expedited processing and follow-up pre-operational inspections, which added additional funds, but not to the number of permits issued. Similar anomalies were observed for Health Certificates and Controlled Substances Registrations (CSRs). The correlation between Health Certificates issued and its revenue improved in FY 2006 through FY 2009, but not that of CSRs, where, in FY 2007, five fewer registrations were issued but \$5,000 more collected. There were fewer fee-exempt physicians registered in FY 2007, and more new registrations, which have higher fees than renewal registrations; thus, may have contributed to the greater amount collected in FY 2007. In FY 2009 and FY 2010, both the number of CSRs and the amount collected in fees increased. In FY 2011 to FY 2013, fee increases for both the CSR and the Sanitary Permit resulted in greater revenues in both of those areas, despite a modest increase in the numbers of documents issued. FY 2015 saw the opening of the new Guam Regional Medical City hospital, and an influx of both new physicians to the island and established physicians adding an additional place of practice, both of which increased the number of CSRs issued for that year and for FY 2016. In FY 2014, the final increment of the Sanitary Permit fee increase went into effect, along with a 5% increase in the number of Sanitary Permits, which came to a 26% increase in revenue. In June of FY 2017, the Division also implemented its Health Certificate Food Safety Training Course alongside GCC, which led to a slight revenue increase even though there was a slight decrease in the number of Health Certificates issued. As of January 2018, the Division facilitated all the Food Safety Training Courses and in June 2018 DEH implemented the Food Safety Refresher Training Courses and retained all revenue. This accounted for the increase in revenue of 63% even though there was a decrease (31%) in the number of Health Certificates issued in FY 2018.

PERMIT CENTER ACTIVITIES

The number of Pre-Operational Inspections conducted in FY 2018 decreased by 6% from FY 2017 (**Figure 21**). Face-to-face consultation also recorded an increase of 18% in FY 2018 compared to FY 2017. However, phone inquiries dropped significantly in FY 2017; this number was the lowest ever recorded since such data were kept. It is possible that more clients sought face-to-face consultations at the Permit Center instead of phone inquiries. Phone inquiries increased once again in FY 2018 by 190% (352 vs. 121) compared to FY 2017. Plan review numbers changed very little from year to year, averaging 40 reviews a year, until FY 2008, when it increased to 407 because of the inclusion of floor plan reviews to the data collected, and it continued that increase in FY 2009, FY 2010, and FY 2013. Consultations in FY 2005 and FY 2006 remained at just over 1,000 and then increased another 85% between FY 2006 and FY 2007, before falling in FY 2008, FY 2009, and FY 2013. The initial increase may have occurred because of the announcement of the military buildup, then fallen off due to delays in the buildup schedule. Consultations did increase in FY 2016 by nearly 62% over FY 2015. Phone tracking, which began in FY 2009, more than doubled in FY 2010, then dropped slightly in FY 2011 through FY 2013, then dramatically decreased in FY 2014, due to the phone line being out of order for five months of the year at the One-Stop Center (Permit Center). Phone inquiries increased modestly in FY 2015, then dramatically in FY 2016.

FIGURE 18. HEALTH CERTIFICATES ISSUED AND REVENUES GENERATED (FY 2005 - FY 2018)

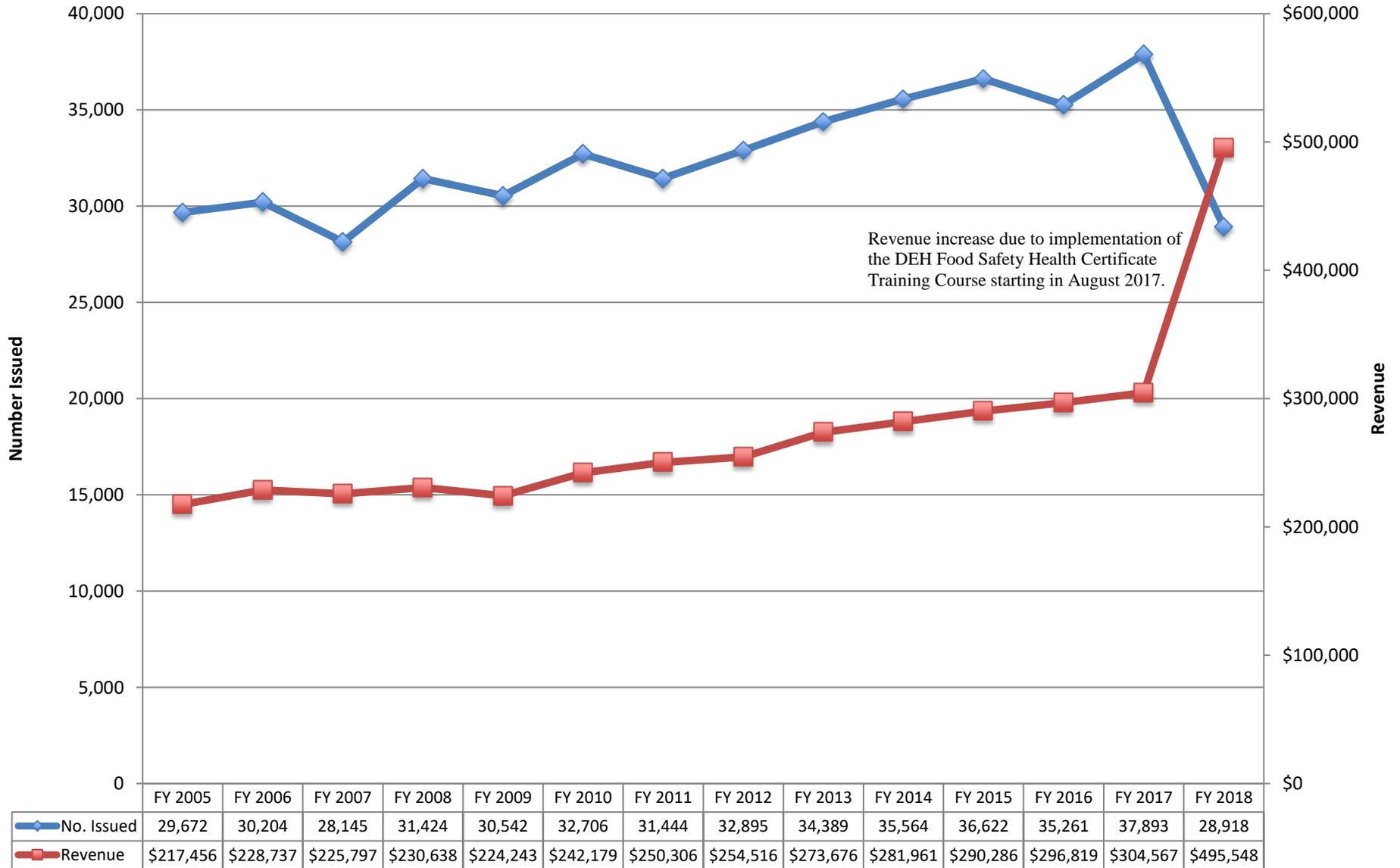
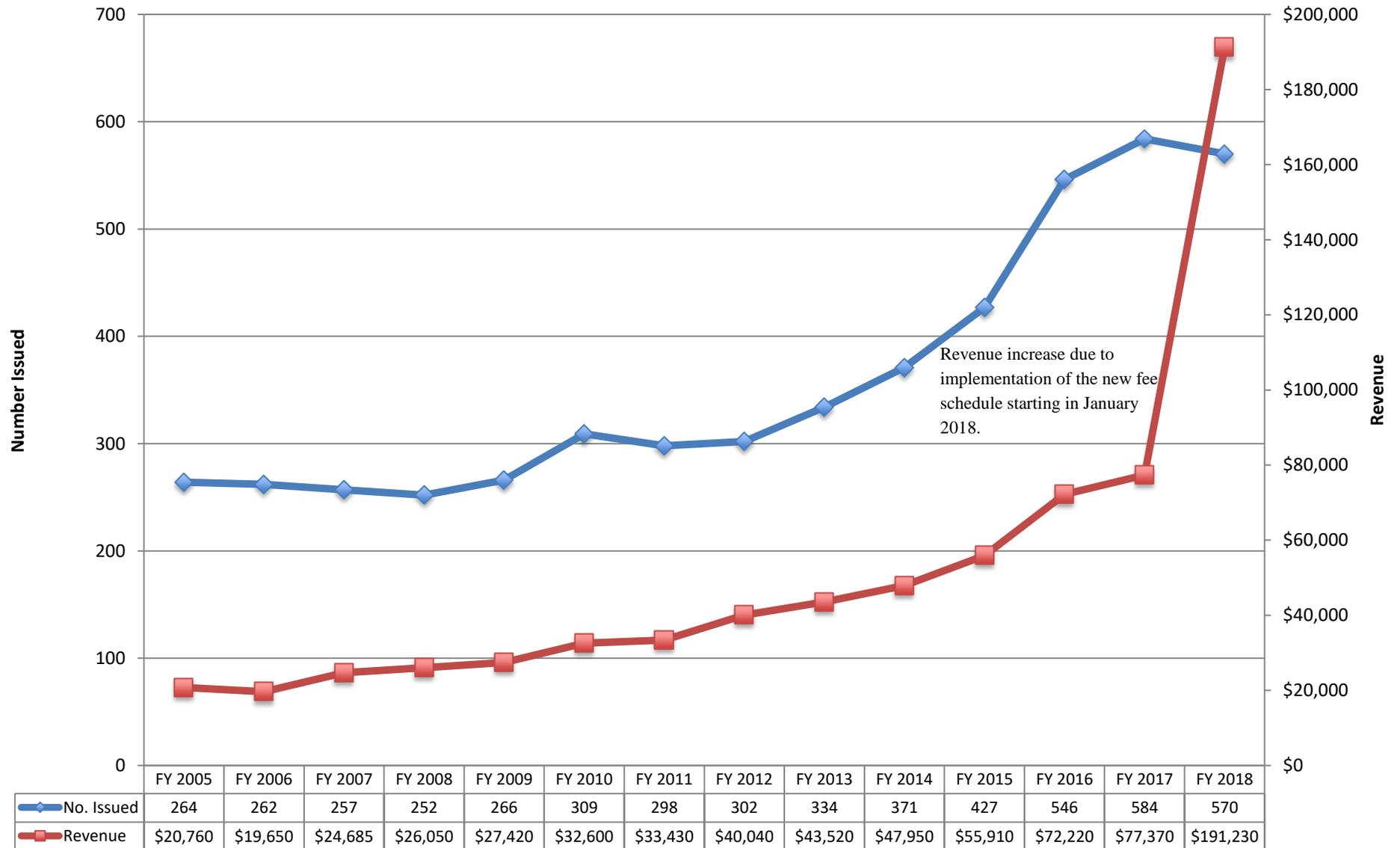
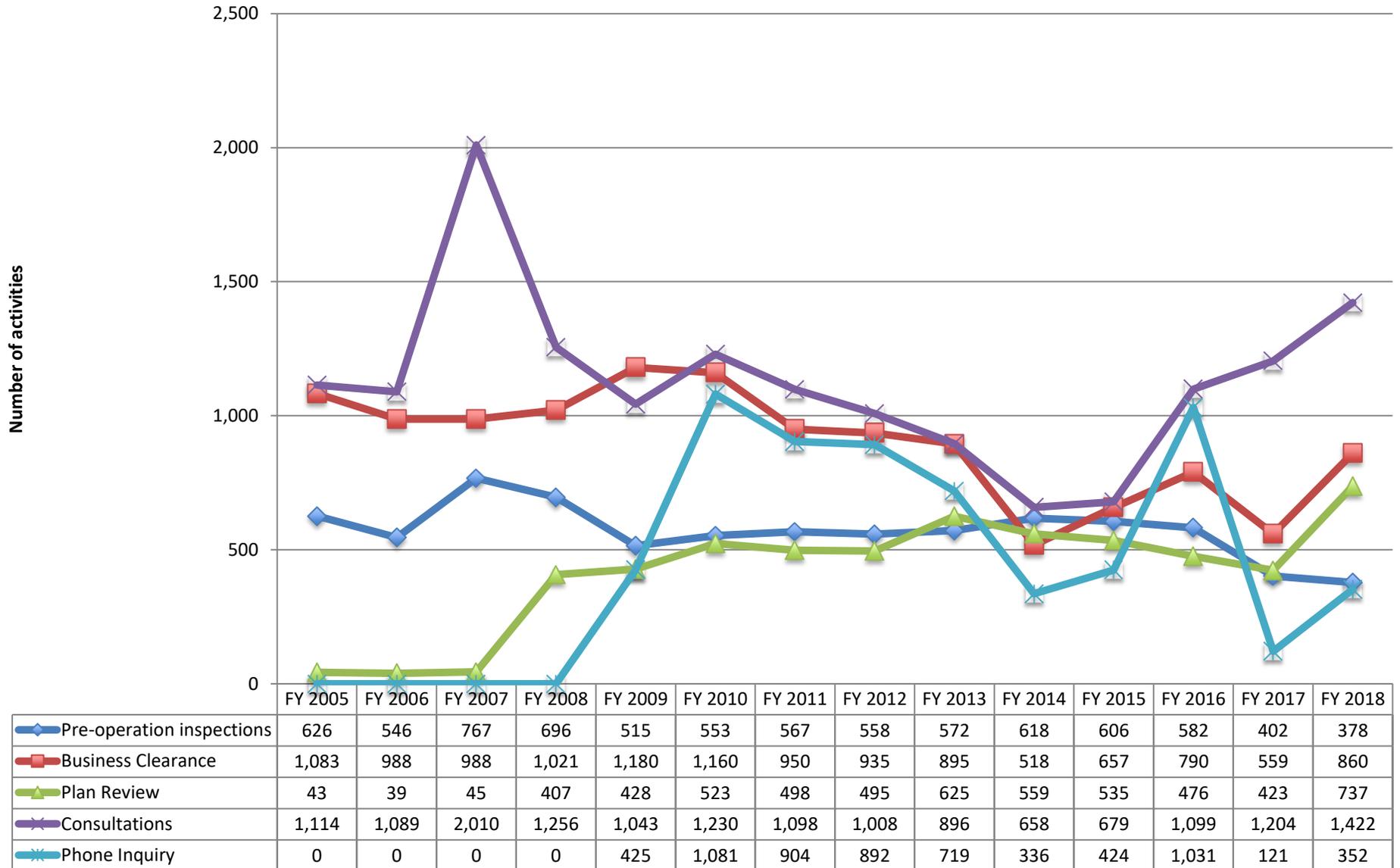


FIGURE 19. CONTROLLED SUBSTANCES REGISTRATIONS ISSUED AND REVENUES GENERATED (FY 2005 - 2018)



**FIGURE 20. PERMIT CENTER ACTIVITIES
(FY 2005 - 2018)**



CONSUMER COMMODITY DETENTIONS

With the exception of food, the detentions of all consumer commodities decreased from FY 2005 to FY 2006. Detainment of commodities is determined by Guam Customs and Quarantine Agency, and changes in the number of detentions may reflect that agency's workload and/or priority. Although the number of food detentions did increase from FY 2005 to FY 2006, it decreased in 2007 before increasing again in FY 2008 (**Figure 21**). Detentions of all commodity types either rose or stayed constant in FY 2008, but food and drug detentions dropped in FY 2009. All detentions except food and hazardous substances fell in FY 2012, and all detentions decreased in FY 2013 through FY 2017, with the exception of drugs in FY 2014 and hazardous substances in FY 2015. In FY 2018, detentions increased slightly compared to FY 2017.

FULL-TIME EMPLOYEES AVAILABLE TO CONDUCT SANITATION INSPECTIONS

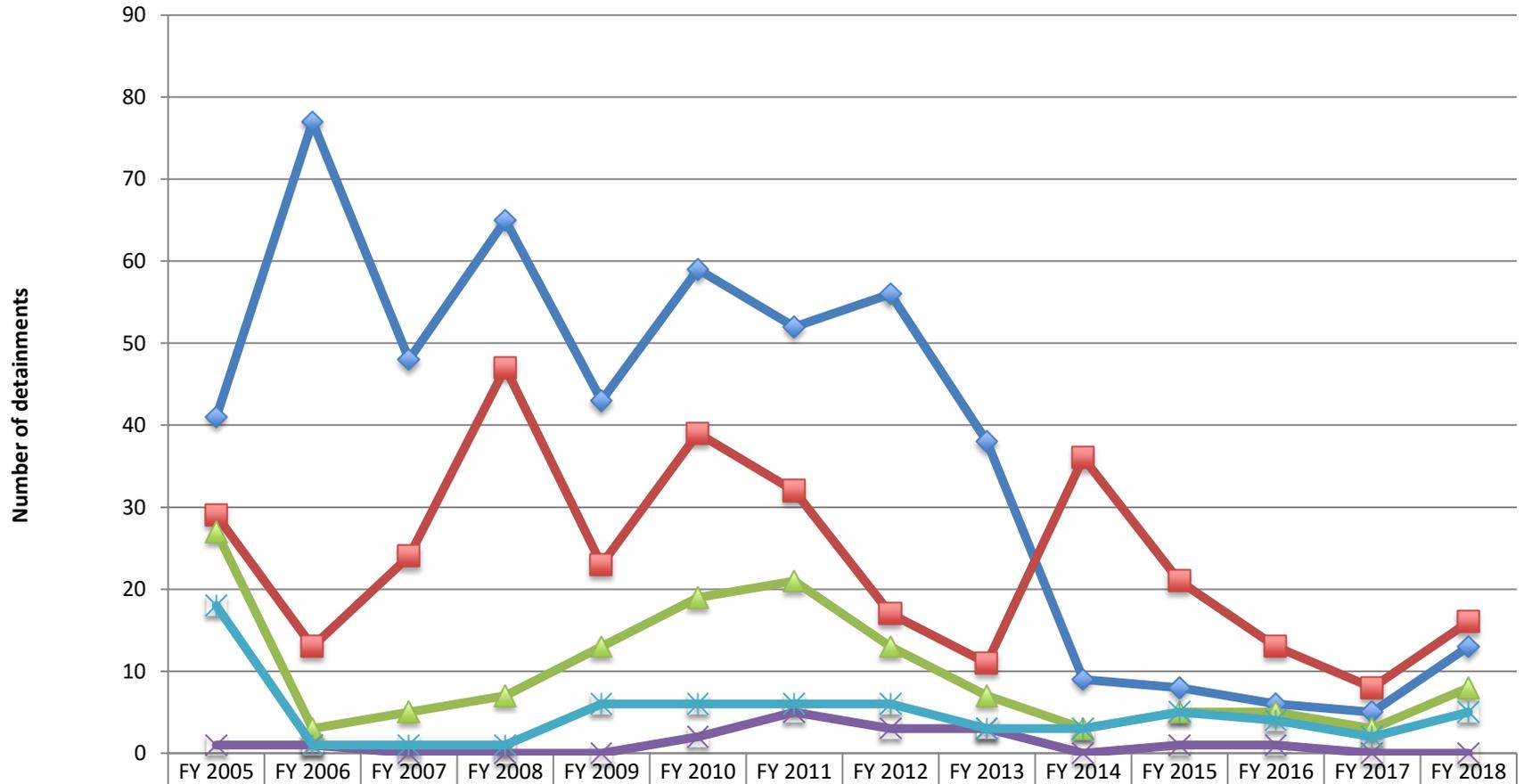
In the five years from FY 2005 to FY 2009, DEH had an average of 3.0 full-time equivalent (FTE) field personnel (**Figure 22**). Over that period, DEH averaged 1,308 sanitation inspections a year with the highest number occurring in FY 2006 with 3,161 inspections. Although DEH was able to complete over 2,000 inspections a year from FY 2005 to FY 2006, the Division conducted only 1,406 sanitation inspections in FY 2007, 1,105 in FY 2008, and 892 in FY 2009, which is less than half of those done in previous years. This can be attributed to the availability of trained personnel to conduct sanitation inspections and the transfer of veteran staff to other programs of the Division.

DEH was able to recruit three additional personnel in FY 2009, but because they needed to complete their training, the total number of inspections completed that year was one of the lowest ever recorded. The number of completed inspections increased slightly in FY 2011, despite fewer FTEs. With the return of one staff from extended medical leave, and the cross-training of staff from the implementation of the EPHO position series in October of 2012, more employees were available in FY 2013, which resulted in an increase of nearly 31% in inspections conducted. In FY 2014, loss of field personnel, along with a focus on training the food industry before the enforcement of the Guam Food Code, resulted in fewer available employees, and thus, fewer inspections. Both the number of field FTEs and the number of inspections conducted continued to drop in FY 2015. Promotions of two field personnel reduced the number of hours they were in the field, which resulted in fewer inspections. Recruitment activities resulted in seven EPHO positions being filled, though one was subsequently vacated, in FY 2015. None of the new staff were field-ready by the end of that fiscal year, but their field time increased in FY 2016, resulting in doubling both the number of FTEs and inspections. In FY 2017 the number of available full-time employees to conduct sanitation inspections of health-regulated establishments was 3.0, which was the most since FY 2013. The increase was reflected in the number of sanitation inspections with 1,602, which was the most inspections accomplished by DEH in the last ten years. FY 2018 saw a slight increase of 3.2 FTEs; however, inspections decreased slightly and can be attributed to time spent on their training.

PLANS AND SPECIFICATIONS

The number of pre-operational inspections conducted each year by the staff of the Plans and Specifications Section fluctuated more from the effects of a changing economy than from changes in staffing (**Figure 23**). Regardless of the number of personnel, all pre-operational inspections were conducted.

FIGURE 21. DETAINMENTS OF CONSUMER COMMODITIES BY TYPE BY THE DIVISION OF ENVIRONMENTAL HEALTH (FY 2005 - 2018)



	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Food	41	77	48	65	43	59	52	56	38	9	8	6	5	13
Drug	29	13	24	47	23	39	32	17	11	36	21	13	8	16
Cosmetics	27	3	5	7	13	19	21	13	7	3	5	5	3	8
Medical Devices	1	1	0	0	0	2	5	3	3	0	1	1	0	0
Hazardous Substances	18	1	1	1	6	6	6	6	3	3	5	4	2	5

**FIGURE 22. INSPECTIONS BY FIELD FULL-TIME EQUIVALENT EMPLOYEES
(FY 2005 - 2018)**

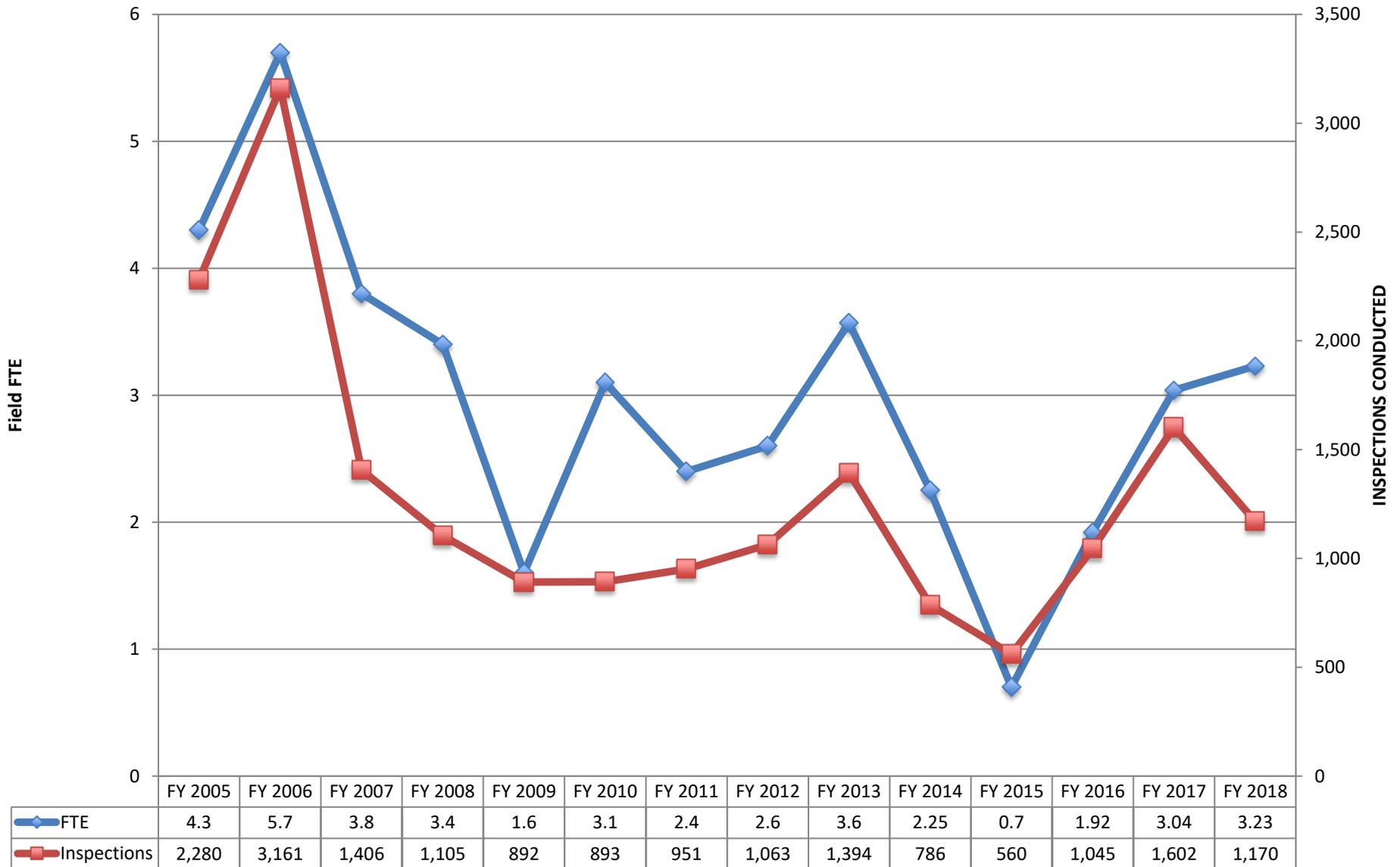
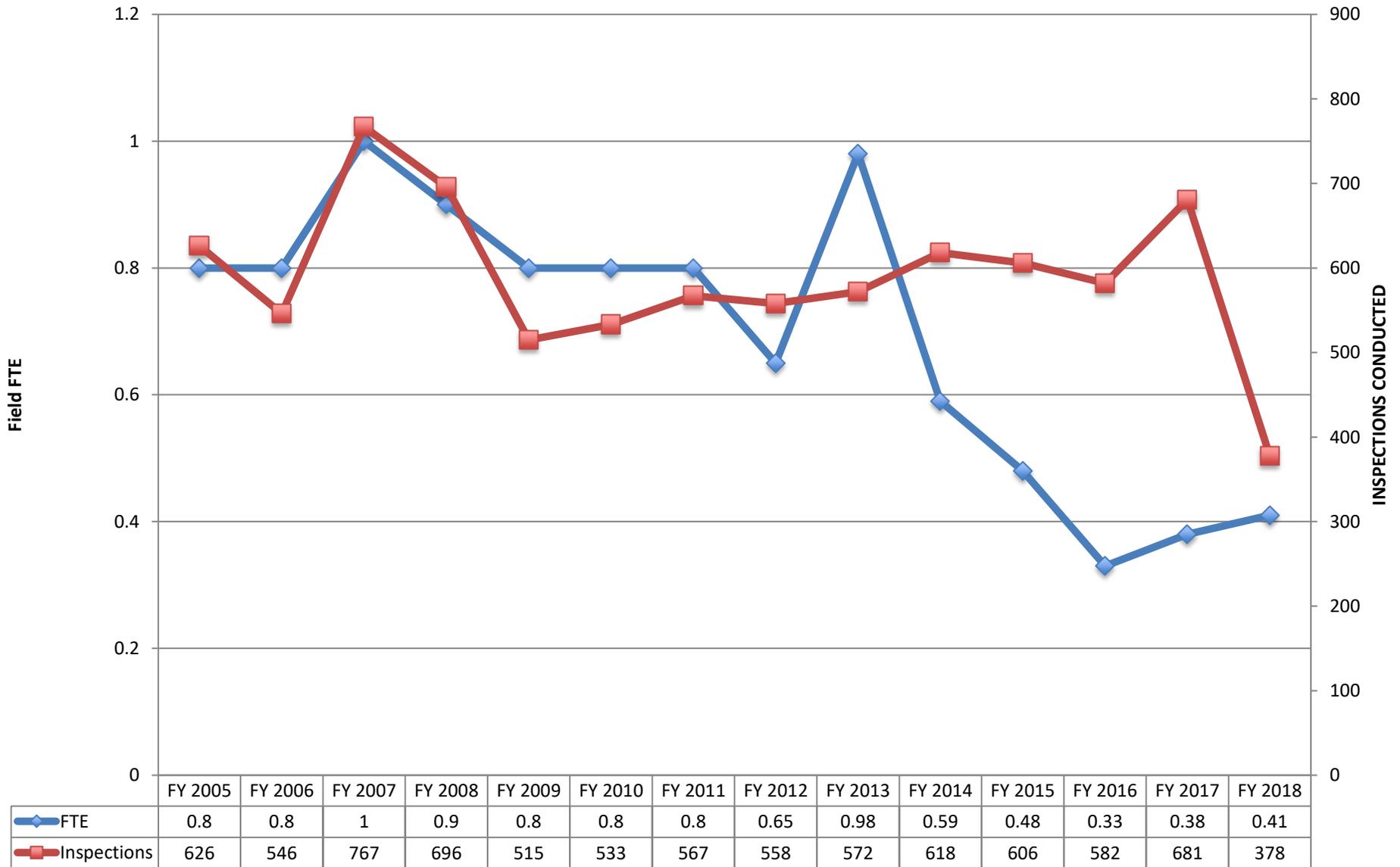


FIGURE 23. INSPECTIONS BY FIELD FTE EMPLOYEES: PLANS & SPECIFICATIONS (FY 2005 - 2018)



ENVIRONMENTAL PUBLIC HEALTH IMPACT

In Fiscal Year 2013, DEH began measuring the environmental public health impact of its activities. To measure impact, DEH evaluated the most commonly cited violations from all inspections done in FY 2018. As presented in **Figure 24**, in FY 2018, the top violation observed in retail food facilities (Eating and Drinking Establishments) was lack of general cleanliness in the kitchen and the rest of the facility, followed by requirements associated with prevention of food contamination. For food manufacturers and processors (Food Establishments), observation of pests was the most common violation during the fiscal year, which was closely followed by requirements associated with floors, walls, and ceilings (**Figure 25**).

Poor general cleanliness in the kitchen and the rest of the facility was the top two violations most cited at childcare centers by DEH in FY 2018 (**Figure 26**). In another institutional facility, school buildings, the most common violation was associated with poor maintenance of the building and toilet facilities (**Figure 27**).

In cosmetology establishments, such as beauty salons and barbershops, poor sanitation of the facility and its instruments, along with prohibited practices, were the most cited infractions (**Figure 28**) during the fiscal year. Massage Establishments, another facility in the cosmetology category, varied from inadequate lighting to poor employee hygiene during the same period (**Figure 29**).

GUAM PRESCRIPTION DRUG MONITORING PROGRAM

The Guam Prescription Drug Monitoring Program has been collecting prescription data from retail pharmacies on Guam since January 2013, and providing reports to pharmacists and prescribers since May of that year. Several pharmacies have uploaded prescriptions dating back to June of 2012. The numbers of prescriptions added to the database and the number of reports run, primarily by pharmacists, have increased each year the program has been in operation (**Figure 30**), with the exception of FY 2016 when the database server crashed and was unavailable for nearly five months. In FY 2018, there was an increase (6.8%) in the overall number of prescriptions written for all controlled substances compared to FY 2017. Reports requested also saw an increase of about 129% compared to FY 2017. This can be attributed to the enhanced search tools available to pharmacies and physicians as a result of the upgrade to the new PDMP database.

Figure 31 shows the top five controlled substances dispensed in FY 2012 - FY 2018. An interesting change emerged in FY 2015, and was repeated in FY 2016, FY 2017, and FY 2018: hydrocodone bitartrate and acetaminophen (i.e., Vicodin) was being replaced in the top five prescribed drugs by Tramadol hydrochloride.

Hydrocodone is an opioid pain medication for moderate to severe pain. It is one of the most, if not the most, prescribed opioid painkiller in the U.S. Tramadol is a narcotic-like drug, also used for treating moderate to severe pain. Tramadol was originally considered the “safer” alternative to other opioid medications (morphine and hydrocodone), but later scheduled as a controlled drug in 2014 after mounting evidence of withdrawal symptoms.

It should be noted that the absence of a particular drug in the graph does not mean it was not prescribed that year, only that it was not prescribed in a quantity high enough to be included in the top five controlled substances dispensed.

FIGURE 24. TOP 5 CITED VIOLATIONS IN EATING & DRINKING ESTABLISHMENTS (FY 2018)

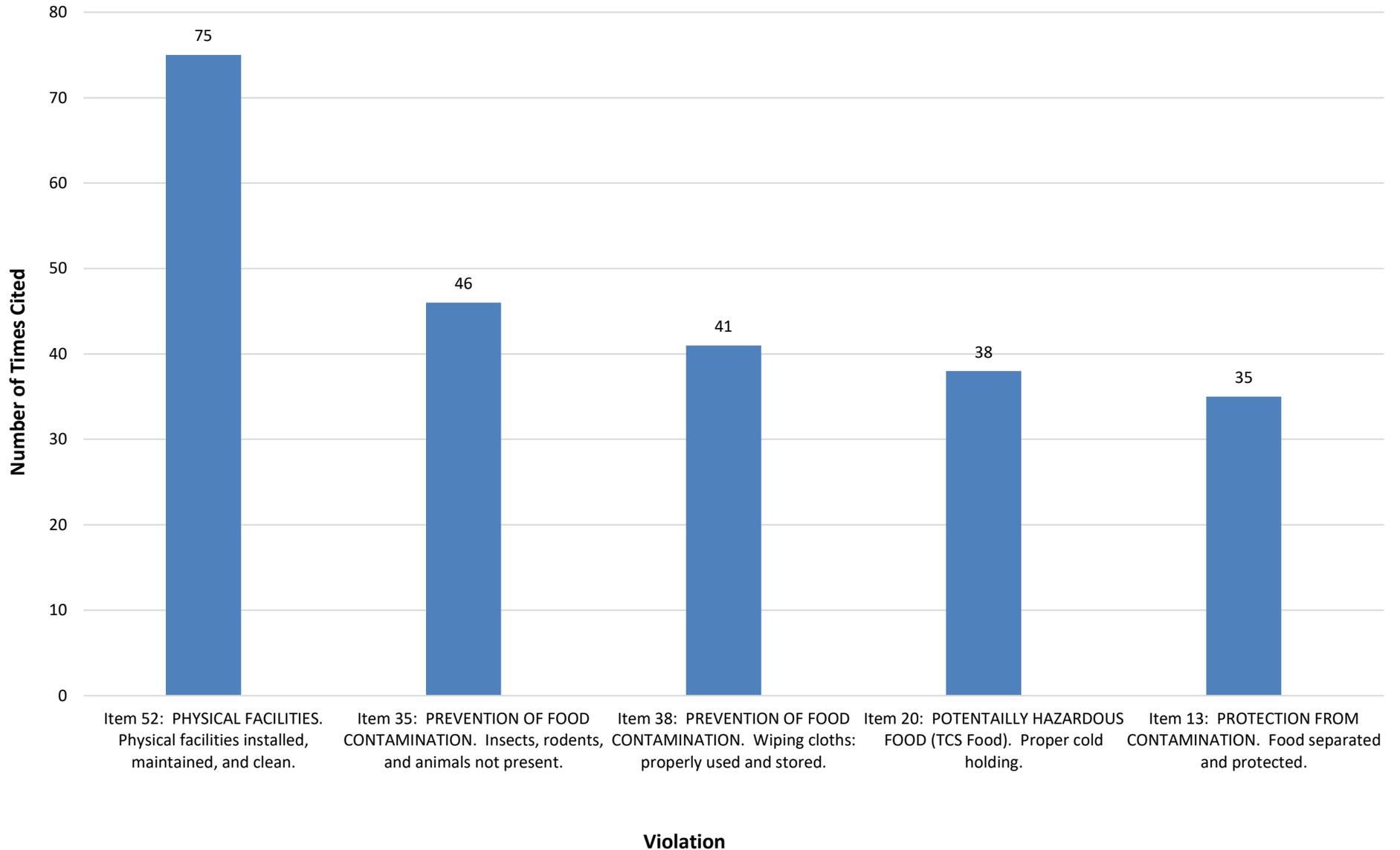


FIGURE 25. TOP 5 CITED VIOLATIONS IN FOOD ESTABLISHMENTS (FY 2018)

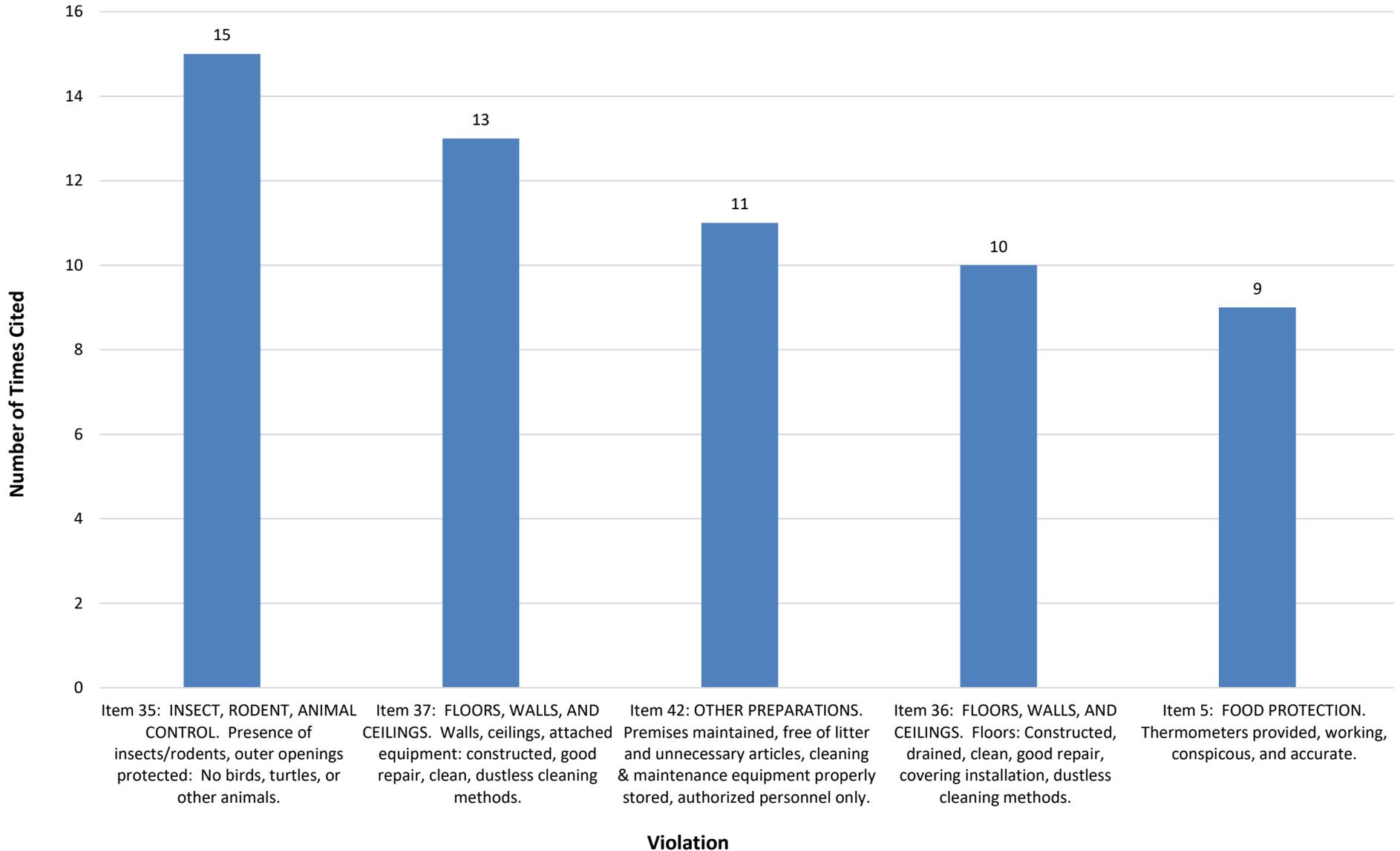


FIGURE 26. TOP 5 CITED VIOLATIONS IN CHILDCARE CENTERS (FY 2018)

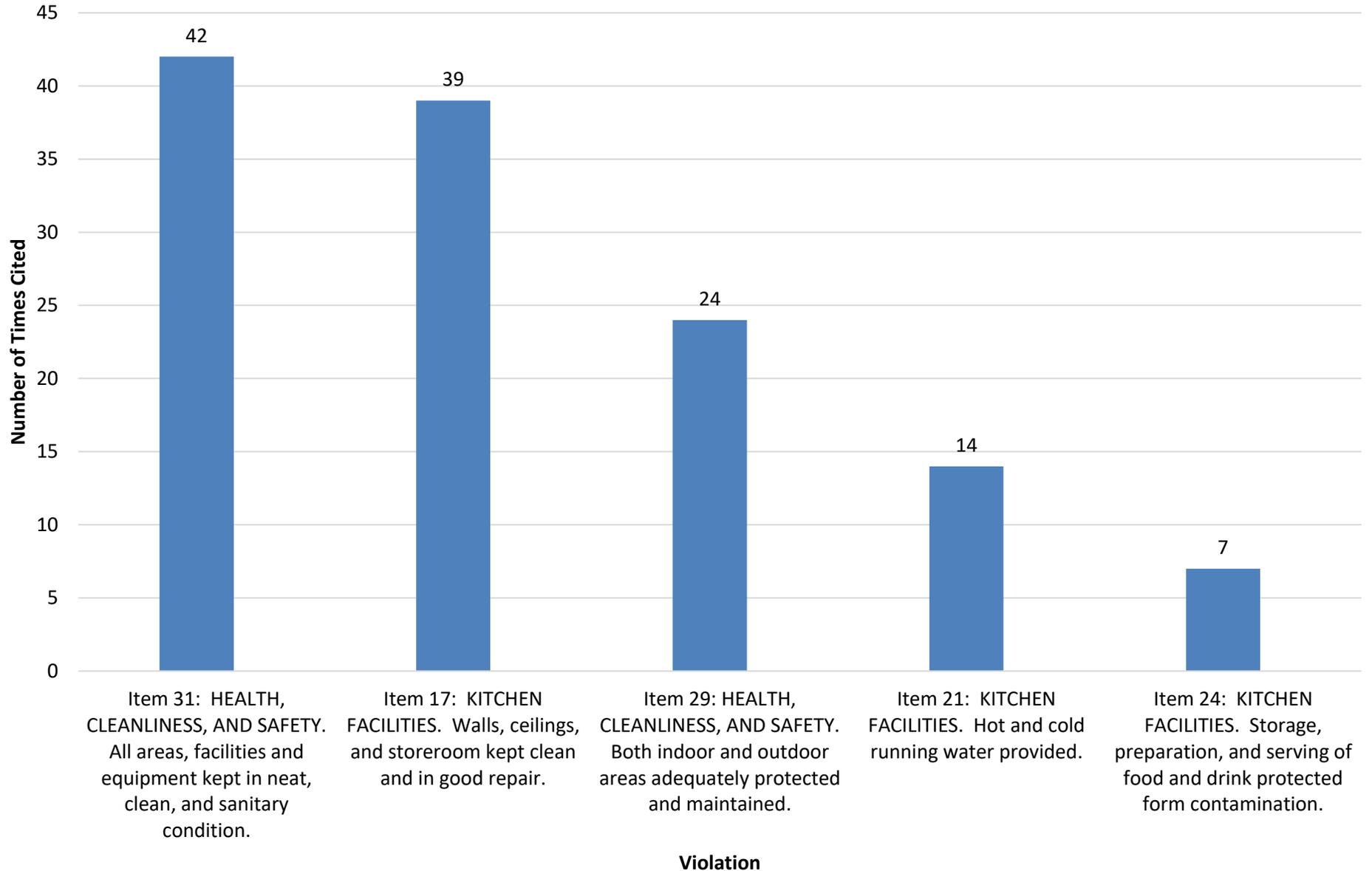


FIGURE 27. TOP 5 CITED VIOLATIONS IN SCHOOL BUILDINGS (FY 2018)

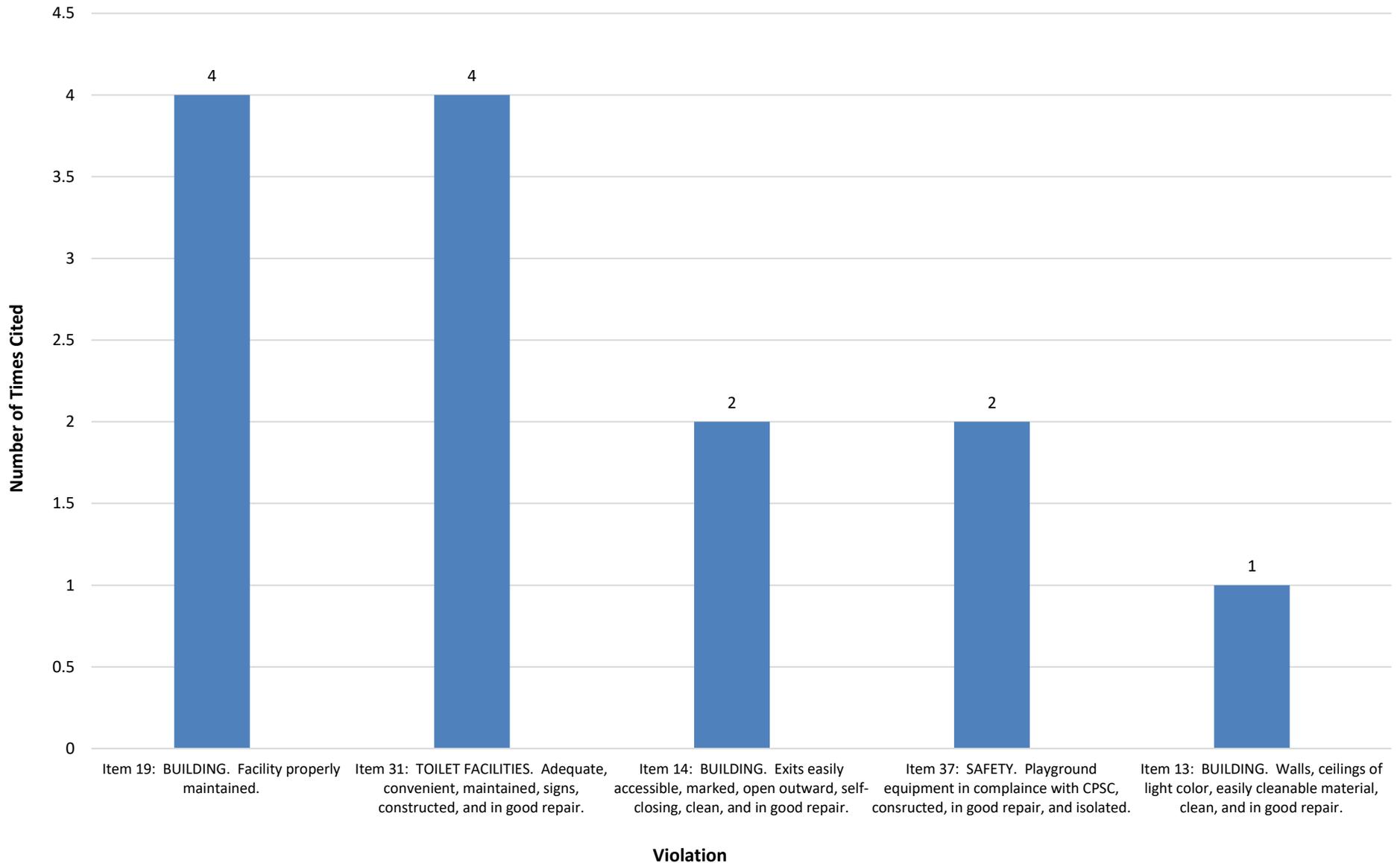


FIGURE 28. TOP 5 CITED VIOLATIONS IN BEAUTY & BARBER ESTABLISHMENTS (FY 2018)

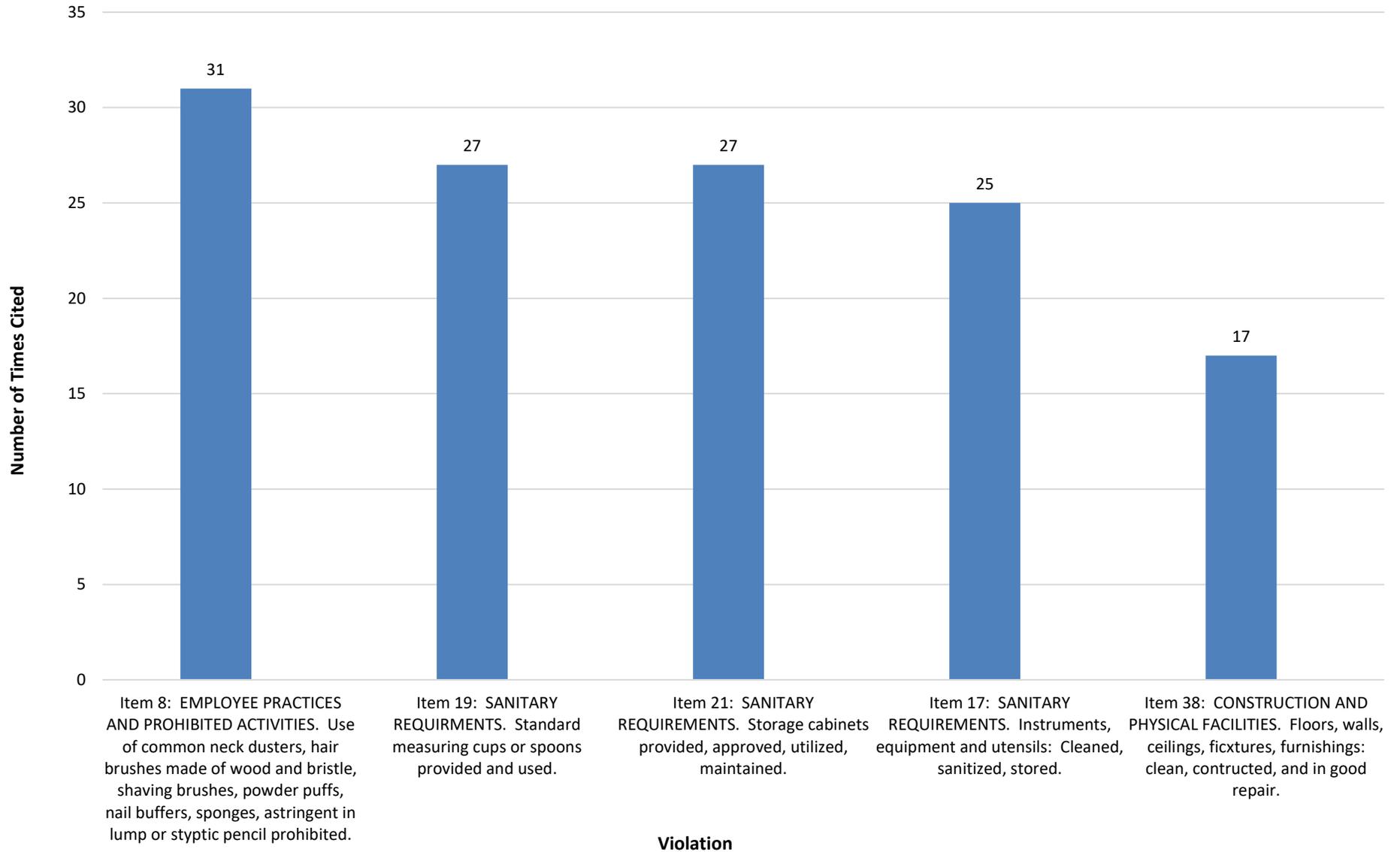
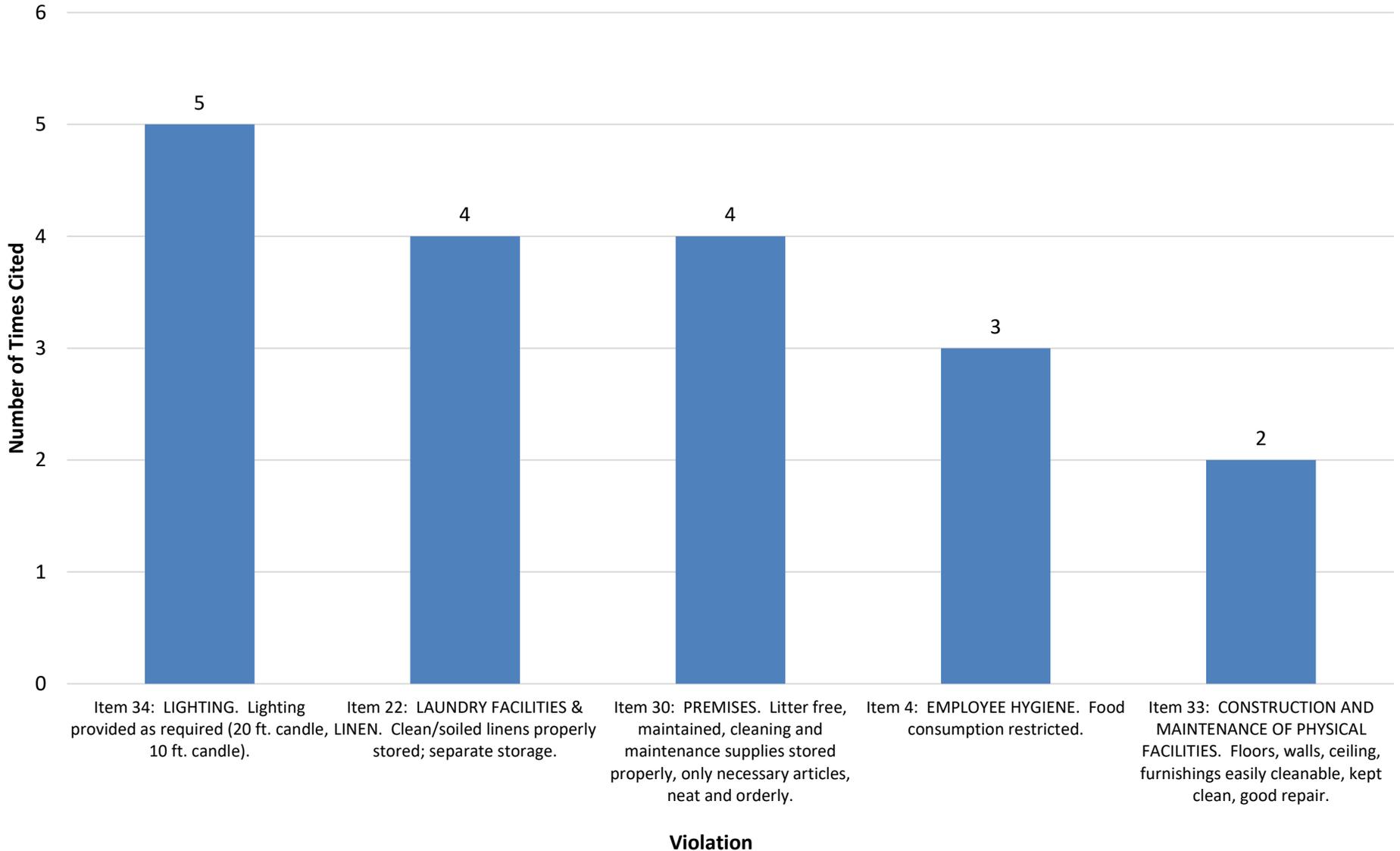
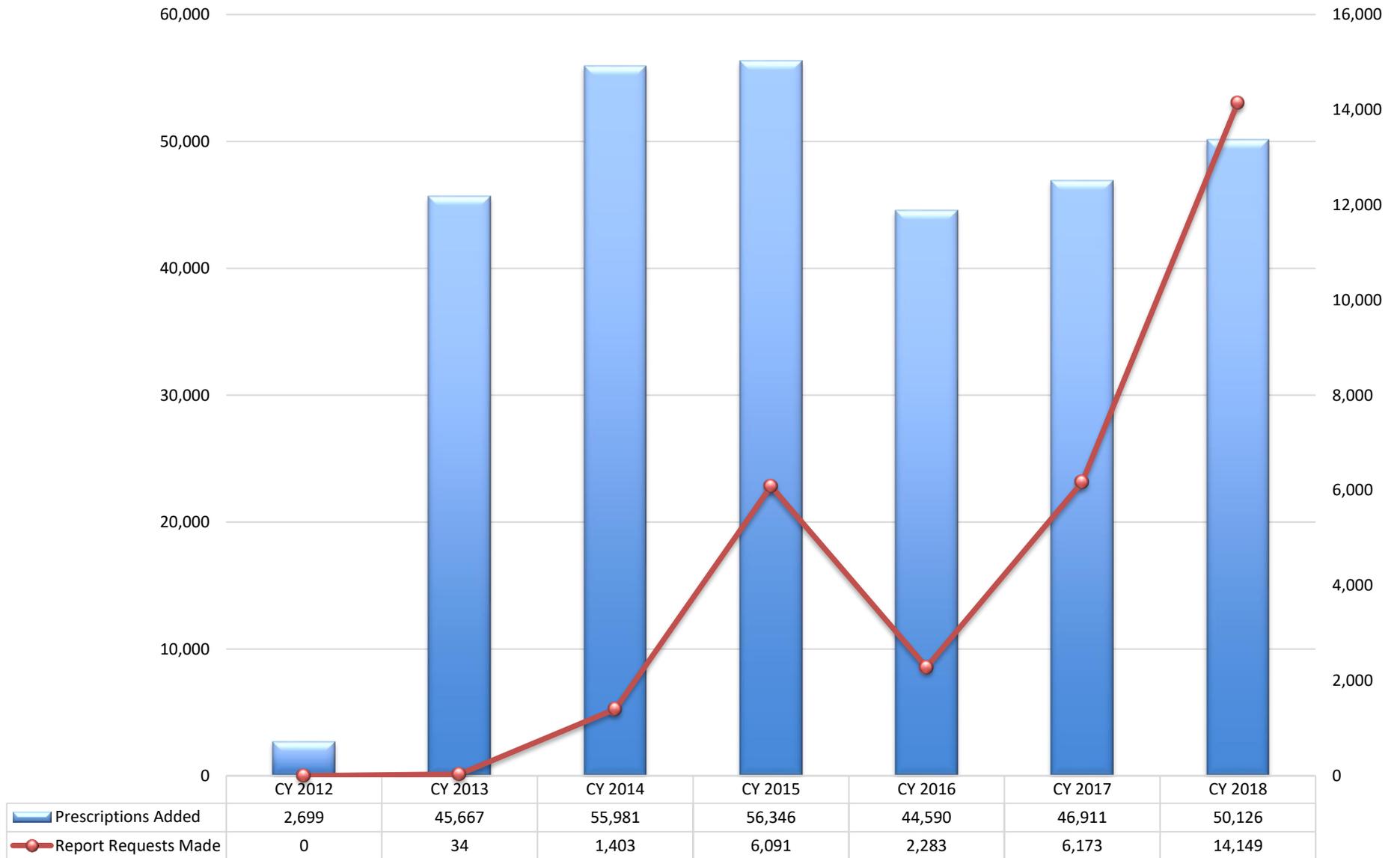


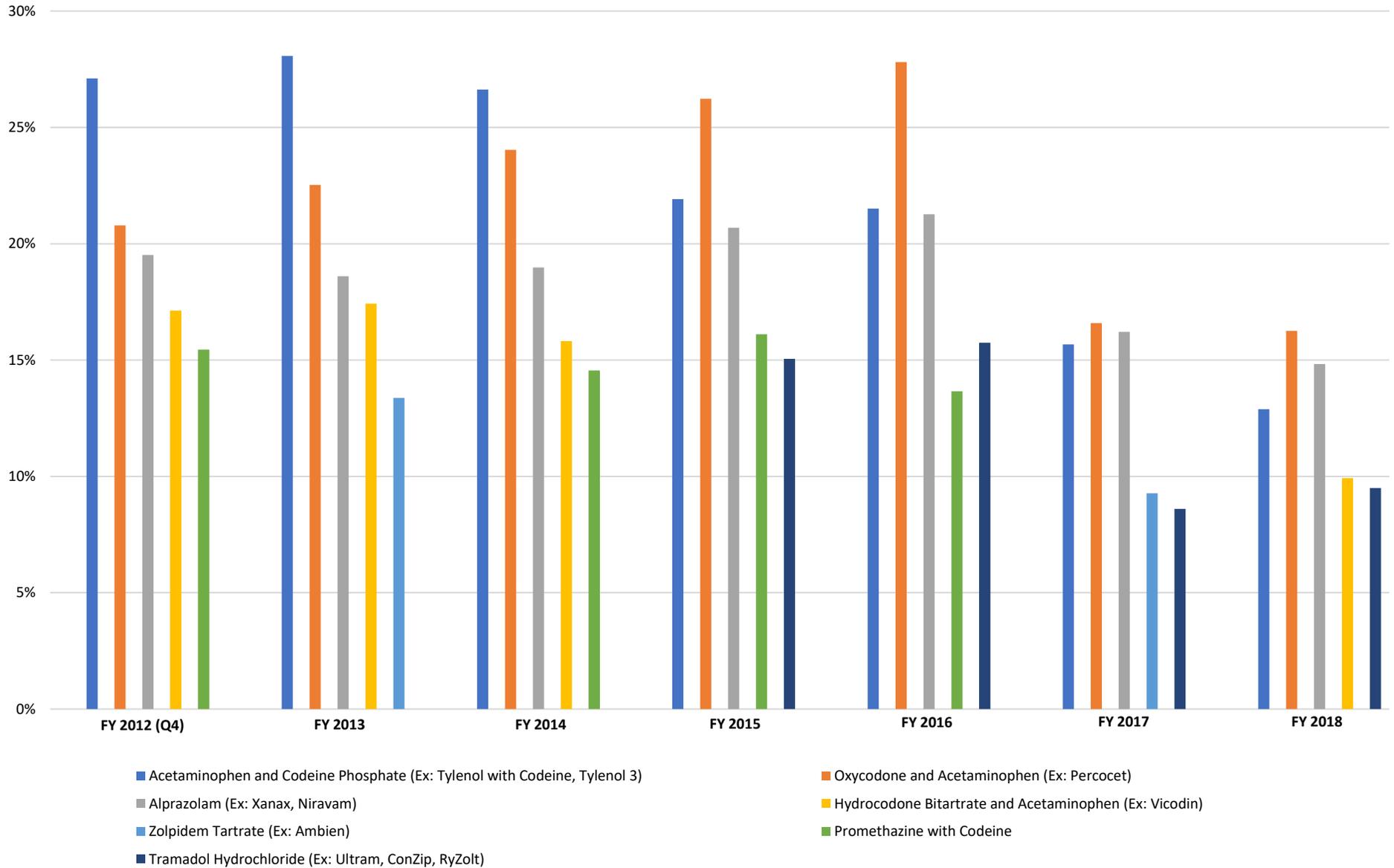
FIGURE 29. TOP 5 CITED VIOLATIONS IN THERAPEUTIC MASSAGE ESTABLISHMENTS (FY 2018)



**FIGURE 30. PRESCRIPTIONS ADDED AND REPORTS REQUESTED
PDMP DATABASE (CY 2012-2018)**



**FIGURE 31. TOP 5 PRESCRIBED CONTROLLED SUBSTANCES
(FY 2012 - 2018)**



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